

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARDS

Before Administrative Judges:

BOARD CAB-01  
ASLBP No. 09-876-HLW  
William J. Froehlich, Chairman  
Thomas S. Moore  
Richard E. Wardwell

BOARD CAB-02  
ASLBP No. 09-877-HLW  
Michael M. Gibson, Chairman  
Alan S. Rosenthal  
Nicholas G. Trikouros

BOARD CAB-03  
ASLBP No. 09-878-HLW  
Paul S. Ryerson, Chairman  
Michael C. Farrar  
Mark O. Barnett

In the Matter of

U.S. DEPARTMENT OF ENERGY

(High Level Waste Repository)

Docket No. 63-001-HLW

May 11, 2009

MEMORANDUM AND ORDER  
(Identifying Participants and Admitted Contentions)

TABLE OF CONTENTS

I.	BACKGROUND .....	- 3 -
II.	KEY CRITERIA.....	- 8 -
	A. Standards Governing Standing .....	- 8 -
	B. Compliance with LSN Requirements.....	- 10 -
	C. Standards Governing Contention Admissibility .....	- 18 -
III.	OVERARCHING ISSUES.....	- 21 -
	A. Special Requirements for NEPA Contentions .....	- 21 -
	1. Background .....	- 23 -
	a. Nuclear Waste Policy Act .....	- 23 -
	b. Commission Rulemaking.....	- 23 -
	c. Subsequent Events .....	- 26 -
	d. NEI Decision.....	- 27 -
	e. Nevada’s 2005 Petition .....	- 30 -
	f. Notice of Hearing.....	- 32 -
	2. Analysis .....	- 32 -
	B. Transportation-Related NEPA Contentions.....	- 36 -
	C. Sufficiency of Affidavits .....	- 41 -
	1. Form of Affidavits.....	- 41 -
	2. Supporting References.....	- 45 -
	D. Allegedly Heightened Standard for Admitting HLW Contentions .....	- 48 -
	E. TSPA Model-Based Contentions.....	- 50 -
	F. “Reasonable Assurance” and “Reasonable Expectation”.....	- 56 -
	G. Legal Issue Contentions .....	- 61 -
IV.	RULINGS ON STANDING.....	- 62 -
	A. Caliente (CAB-01) .....	- 63 -
	B. California (CAB-02) .....	- 64 -
	C. NCA (CAB-02).....	- 66 -
	D. JTS (CAB-02).....	- 68 -
	E. NEI (CAB-03) .....	- 71 -
	1. Standing as of Right .....	- 71 -
	2. Discretionary Intervention.....	- 79 -
V.	RULINGS ON LSN COMPLIANCE.....	- 83 -
	A. Nevada (CAB-01).....	- 83 -
	B. Clark (CAB-01).....	- 88 -
	C. JTS (CAB-02).....	- 93 -
	1. TIM .....	- 93 -
	2. TSO .....	- 97 -
	D. NCA (CAB-02).....	- 99 -
	E. Inyo (CAB-03).....	- 100 -
VI.	RULINGS ON CONTENTIONS .....	- 101 -
VII.	RULINGS ON PETITIONS .....	- 105 -
	A. CAB-01.....	- 105 -

B. CAB-02.....	- 105 -
C. CAB-03.....	- 105 -
VIII. RULINGS ON PROCEDURAL MATTERS (CAB-01) .....	- 106 -
A. Interested Governmental Bodies.....	- 106 -
B. Eureka Motion for Leave to File a Reply .....	- 106 -
C. Nevada’s Motion to Amend Petition to Intervene as a Full Party .....	- 107 -
IX. DISCUSSION (CAB-01) .....	- 108 -
A. Certain Admitted Contentions .....	- 108 -
1. NEV-SAFETY-001 .....	- 109 -
a. Nevada, DOE and the NRC Staff Arguments.....	- 109 -
b. Board Analysis .....	- 114 -
2. NEV-SAFETY-002.....	- 123 -
3. Institutional Concerns Regarding NEV-SAFETY-001 and -002 .....	- 125 -
4. Legal Issue Contentions .....	- 125 -
B. Inadmissible Contentions .....	- 127 -
X. DISCUSSION AND RULING ON MOTION (CAB-02).....	- 130 -
A. NCA Contentions.....	- 130 -
1. NCA-MISC-001.....	- 130 -
2. NCA-MISC-002.....	- 131 -
B. JTS Contentions.....	- 132 -
1. TSO’s Motion for Leave to File Amended Petition.....	- 132 -
2. JTS-NEPA-002 .....	- 134 -
C. Certain California and Nevada Contentions .....	- 136 -
1. CAL-NEPA-005 .....	- 136 -
2. CAL-NEPA-009 .....	- 136 -
3. CAL-NEPA-016 .....	- 137 -
4. NEV-SAFETY-130.....	- 138 -
XI. DISCUSSION (CAB-03) .....	- 138 -
A. Certain Admitted Contentions .....	- 138 -
B. Inadmissible Contentions .....	- 139 -
XII. CONCLUSION.....	- 140 -
XIII. ORDER.....	- 141 -
ATTACHMENT A	
ATTACHMENT B	

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MEMORANDUM AND ORDER  
(Identifying Participants and Admitted Contentions)

Before these three Construction Authorization Boards (CABs or Boards) are twelve petitions to intervene in the proceeding on the Application (Application) by the Department of Energy (DOE or Applicant) seeking authorization to construct a geologic repository for high-level nuclear waste (HLW) at Yucca Mountain, in Nye County, Nevada. Collectively, the petitions proffer 318 proposed contentions for adjudication.

DOE opposes all petitions in their entirety. The Nuclear Regulatory Commission Staff (NRC Staff) opposes the majority of petitions, but does not oppose the petitions of the State of Nevada (Nevada), Nye County (Nye), and the amended petition of Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation (TSO). The NRC Staff opposes 216 of the 239 contentions proffered, collectively, by Nevada, Nye, and TSO in its amended petition.

In addition, Eureka County, Nevada (Eureka) and Lincoln County, Nevada (Lincoln) filed unopposed requests to participate as interested governmental bodies under 10 C.F.R. § 2.315(c).

The three Boards were constituted to manage the first phase of this complex proceeding.<sup>1</sup> In accordance with the Commission's regulations and applicable law, the Boards reviewed all intervention petitions with an important, but limited purpose, that is, to begin to simplify the proceeding by identifying matters that merit further consideration and rejecting at the outset: (1) petitions by participants that lack standing; (2) petitions by participants that were unable to demonstrate timely and substantial compliance with applicable Licensing Support Network (LSN) requirements; and (3) contentions that fail to satisfy applicable requirements.

The three Boards set forth their independent rulings in this Memorandum and Order. The Chief Administrative Judge assigned Nevada's petition to CAB-01. Because of the number of proposed contentions submitted by Nevada, however, the Chief Administrative Judge allocated Nevada's 229 contentions among the Boards as follows:

CAB-01: Safety Contentions 1-67; NEPA Contentions 1-8; Miscellaneous Contentions 1-2.

CAB-02: Safety Contentions 68-134; NEPA Contentions 9-16; Miscellaneous Contentions 3-4.

CAB-03: Safety Contentions 135-201; NEPA Contentions 17-23; Miscellaneous Contention 5.

The Chief Administrative Judge assigned each of the other petitions and associated contentions to a single Board, as follows:

CAB-01: Nye County; Clark County; White Pine County; and Caliente Hot Springs Resort.

CAB-02: State of California; Nevada Counties of Churchill, Esmeralda, Lander, and Mineral; Native Community Action Council; Timbisha Shoshone Tribe; and the Timbisha Shoshone Yucca Mountain Oversight Program.

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<sup>1</sup> See Department of Energy; Establishment of Atomic Safety and Licensing Boards, 74 Fed. Reg. 4477 (Jan. 26, 2009).

CAB-03: Inyo County; and the Nuclear Energy Institute.

Each Board adopts as its own the discussion that follows concerning the legal standards that govern the Boards' decisions and the conclusions reached on the overarching legal issues. Each Board has independently ruled, however, upon the petitions and contentions for which it is responsible.

Collectively, through their independent rulings on assigned matters, the three Boards find that eight petitions should be granted. One petition – that of Caliente Hot Springs Resort – must be denied, because the petitioner failed to demonstrate standing.

Two original petitioners – the Timbisha Shoshone Tribe and TSO – subsequently agreed to be treated as a single participant. They would have been admitted as a party on that basis, except for their failure to demonstrate substantial and timely compliance with the requirements of the LSN. The resulting entity, however, will be granted party status at such time as it can demonstrate LSN compliance. Finally, the Native Community Action Council would have been admitted as a party, except for its failure to demonstrate substantial and timely LSN compliance. It likewise will be granted party status at such time as it can demonstrate LSN compliance.

The unopposed requests of Eureka and Lincoln to participate as interested governmental bodies are granted.

I. BACKGROUND

On June 3, 2008, DOE submitted the Application to the NRC. The NRC Staff accepted the Application for docketing on September 8, 2008.<sup>2</sup> The NRC Staff also determined that it is practicable to adopt, with further supplementation, the Environmental Impact Statement (EIS) and supplements prepared by DOE.<sup>3</sup>

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<sup>2</sup> Department of Energy; Notice of Acceptance for Docketing of a License Application for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain, NV, 73 Fed. Reg. 53,284 (Sept. 15, 2008).

<sup>3</sup> See U.S. Nuclear Regulatory Commission Staff's Adoption Determination Report for the U.S. Department of Energy's Environmental Impact Statements for the Proposed Geologic Repository at Yucca Mountain (Sept. 5, 2008) (ADAMS Accession No. ML082420342).

The Commission published a hearing notice on October 22, 2008.<sup>4</sup> The hearing notice required any person whose interests might be affected by this proceeding and who wished to participate as a party to file a petition for leave to intervene within sixty days of the notice, in accordance with 10 C.F.R. § 2.309.

On or before December 22, 2008, timely petitions were filed by: (1) Nevada;<sup>5</sup> (2) the Nuclear Energy Institute (NEI);<sup>6</sup> (3) Nye;<sup>7</sup> (4) Churchill, Esmeralda, Lander, and Mineral Counties (jointly) (Nevada 4 Counties);<sup>8</sup> (5) the State of California (California);<sup>9</sup> (6) the Native Community Action Council (NCA);<sup>10</sup> (7) the Timbisha Shoshone Tribe (TIM);<sup>11</sup> (8) Clark County (Clark);<sup>12</sup> (9) Inyo County (Inyo);<sup>13</sup> (10) White Pine County (White Pine);<sup>14</sup> (11) TSO;<sup>15</sup> and

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<sup>4</sup> U.S. Department of Energy (High Level Waste Repository); Notice of Hearing and Opportunity to Petition for Leave to Intervene on an Application for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain, 73 Fed. Reg. 63,029 (Oct. 22, 2008) [Notice of Hearing].

<sup>5</sup> State of Nevada's Petition to Intervene as a Full Party (Dec. 19, 2008) [Nevada Petition].

<sup>6</sup> The Nuclear Energy Institute's Petition to Intervene (Dec. 19, 2008) [NEI Petition].

<sup>7</sup> Nye County, Nevada Petition to Intervene and Contentions (Dec. 19, 2008) [Nye Petition].

<sup>8</sup> Nevada Counties of Churchill, Esmeralda, Lander and Mineral Petition to Intervene (Dec. 19, 2008) [Nevada 4 Counties Petition].

<sup>9</sup> State of California's Petition for Leave to Intervene in the Hearing (Dec. 20, 2008) [California Petition]. Although California appears to have proffered 25 NEPA contentions, there is no CAL-NEPA-006.

<sup>10</sup> Native Community Action Council Petition to Intervene as a Full Party (Dec. 22, 2008) [NCA Petition]. Although in previous orders and at oral argument we referred to the Native Community Action Council as NCAC, we will henceforth identify it by its designated three-letter acronym NCA.

<sup>11</sup> Timbisha Shoshone Tribe's Petition for Leave to Intervene in the Hearing (Dec. 22, 2008) [TIM Petition].

<sup>12</sup> Clark County, Nevada's Request for Hearing, Petition to Intervene and Filing of Contentions (Dec. 22, 2008) [Clark Petition].

<sup>13</sup> Petition for Leave to Intervene by the County of Inyo, California on an Application by the U.S. Department of Energy for Authority to Construct a Geologic High-Level Waste Repository at a Geologic Repository Operations Area at Yucca Mountain, Nevada (Dec. 22, 2008) [Inyo Petition].

(12) Caliente Hot Springs Resort (Caliente).<sup>16</sup> Since filing its initial petition, TSO has sought to file an amended petition.<sup>17</sup> Also, TIM and TSO have sought and obtained authorization to merge their respective efforts in this proceeding and to represent jointly the Timbisha Shoshone Tribe, hereinafter Joint Timbisha Shoshone Tribal Group (JTS).<sup>18</sup> Eureka and Lincoln filed requests to participate as interested governmental participants in accordance with 10 C.F.R. § 2.315(c).<sup>19</sup> On or before January 16, 2009, the Applicant filed timely answers.<sup>20</sup> The Applicant filed a timely answer to TSO's proffered amended petition on March 27, 2009.<sup>21</sup>

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<sup>14</sup> White Pine County's Request for Hearing and Petition for Leave to Intervene Including Supporting Contentions on the Application by the U.S. Department of Energy for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain (Dec. 22, 2008).

<sup>15</sup> Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation Petition to Intervene as a Full Party (Dec. 22, 2008) [TSO Petition]. Although in previous orders and at oral argument we referred to the Timbisha Shoshone Yucca Mountain Oversight Program as TOP, we will henceforth identify it by its designated three-letter acronym TSO.

<sup>16</sup> Caliente Hot Springs Resort – NEPA – Impacts on Land Use and Ownership (Dec. 19, 2008) [Caliente Petition]. As discussed Section IV.A *infra*, while timely, the Caliente Petition was not initially filed and served in the manner specified by NRC regulations.

<sup>17</sup> Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation's Corrected Motion for Leave to File Its Amended Petition to Intervene as a Full Party (Mar. 5, 2009) [TSO Corrected Motion for Leave]; Amended Petition of the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation to Intervene as a Full Party (Mar. 5, 2009) [TSO Amended Petition].

<sup>18</sup> CAB Order (Accepting Joint Representation of Timbisha Shoshone Tribe) (Apr. 22, 2009) (unpublished).

<sup>19</sup> Eureka County, Nevada's Request to Participate as Interested Governmental Participant (Dec. 22, 2008) [Eureka Request]; Lincoln County, Nevada's Corrected Request to Participate as Interested Governmental Participant (Dec. 22, 2008) [Lincoln Request].

<sup>20</sup> Answer of the U.S. Department of Energy to the State of Nevada's Petition to Intervene (Jan. 16, 2009) [DOE Nevada Answer]; Answer of the U.S. Department of Energy to the Nuclear Energy Institute's Petition to Intervene (Jan. 16, 2009) [DOE NEI Answer]; Answer of the U.S. Department of Energy to Nye County, Nevada Petition to Intervene and Contentions (Jan. 15, 2009) [DOE Nye Answer]; Answer of the U.S. Department of Energy to Nevada Counties of Churchill, Esmeralda, Lander and Mineral Petition to Intervene (Jan. 15, 2009) [DOE Nevada 4 Counties Answer]; Answer of the U.S. Department of Energy to State of California's Petition for Leave to Intervene in the Hearing (Jan. 16, 2009) [DOE California Answer]; Answer of the U.S. Department of Energy to the Native Community Action Council Petition to Intervene as a Full Party (Jan. 15, 2009) [DOE NCA Answer]; Answer of the U.S. Department of Energy to

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On February 9, 2009, the NRC Staff filed a timely answer to all petitions.<sup>22</sup> On March 20, 2009, the NRC Staff filed a timely answer to TSO's proffered amended petition.<sup>23</sup> On or before February 24, 2009, ten of the petitioners filed timely replies.<sup>24</sup> Two petitioners sought

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Timbisha Shoshone Tribe's Petition for Leave to Intervene in the Hearing (Jan. 15, 2009) [DOE TIM Answer]; Answer of the U.S. Department of Energy to Clark County, Nevada's Request for Hearing, Petition to Intervene and Filing of Contentions (Jan. 15, 2009) [DOE Clark Answer]; Answer of the U.S. Department of Energy to a Petition for Leave to Intervene by the County of Inyo, California on an Application by the U.S. Department of Energy for Authority to Construct a Geologic High-Level Waste Repository at a Geologic Repository Operations Area at Yucca Mountain, Nevada (Jan. 15, 2009) [DOE Inyo Answer]; Answer of the U.S. Department of Energy to White Pine County's Request for Hearing and Petition for Leave to Intervene Including Supporting Contentions on the Application by the U.S. Department of Energy for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain (Jan. 15, 2009) [DOE White Pine Answer]; Answer of the U.S. Department of Energy to the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation Petition to Intervene as a Full Party (Jan. 15, 2009) [DOE TSO Answer]; Answer of the U.S. Department of Energy to Caliente Hot Springs Resort's Petition to Intervene (Jan. 15, 2009).

<sup>21</sup> U.S. Department of Energy's Answer to Timbisha Shoshone Yucca Mountain Oversight Program Corrected Motion for Leave to File Amended Petition to Intervene and Amended Petition (Mar. 27, 2009) [DOE Answer to TSO Amended Petition].

<sup>22</sup> NRC Staff Answer to Intervention Petitions (Feb. 9, 2009) [NRC Staff Answer].

<sup>23</sup> NRC Staff Answer to the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation's Motion for Leave to File Amended Intervention Petition and Amended Intervention Petition (Mar. 20, 2009) [NRC Staff Answer to TSO Amended Petition].

<sup>24</sup> State of Nevada's Reply to DOE's Answer to Nevada's Petition to Intervene as a Full Party (Feb. 24, 2009) [Nevada DOE Reply]; State of Nevada's Reply to NRC Staff's Answer to Nevada's Petition to Intervene as a Full Party (Feb. 24, 2009); Reply of the Nuclear Energy Institute to the Answers to its Petition to Intervene by the Department of Energy, the NRC Staff, and the State of Nevada (Feb. 24, 2009) [NEI Reply]; Nye County's Response to the Answers of NRC Staff and the Department of Energy (Feb. 24, 2009) [Nye Reply]; Nevada Counties of Churchill, Esmeralda, Lander and Mineral Replies to the U.S. Department of Energy Answer to the Nevada Counties of Churchill, Esmeralda, Lander and Mineral [Petition] to Intervene (Feb. 24, 2009) [Nevada 4 Counties DOE Reply]; Nevada Counties of Churchill, Esmeralda, Lander, and Mineral Replies to the NRC Staff Answer to the Nevada Counties of Churchill, Esmeralda, Lander, and Mineral Petition to Intervene (Feb. 24, 2009); State of California's Reply to Answer of the U.S. Department of Energy and NRC Staff Answer (Feb. 23, 2009) [California Reply]; Reply of Clark County, Nevada to the Answers of the U.S. Department of Energy and the Nuclear Regulatory Commission Staff (Feb. 24, 2009) [Clark Reply]; Responses of the County of Inyo to the Answers of the U.S. Department of Energy and NRC Staff (Feb. 24, 2009) [Inyo Reply]; Corrected Reply of White Pine County to the U.S. Department of Energy and Nuclear Regulatory Commission Staff Answers to White Pine County's Request for Hearing and Petition for Leave to Intervene Including Supporting Contentions on the Application by the U.S. Department of Energy for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain (Feb. 23, 2009); Reply of the Timbisha Shoshone Yucca

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and were granted 15-day extensions of time to file replies and timely submitted their replies on March 11, 2009.<sup>25</sup> TSO filed timely replies to the DOE and NRC Staff answers to its proffered amended petition.<sup>26</sup>

On January 16, 2009, Nevada filed a motion to amend its petition to intervene as a full party.<sup>27</sup> On February 9, 2009, Nevada filed an answer to NEI's petition to intervene.<sup>28</sup> NEI filed a motion to strike Nevada's answer on February 13, 2009.<sup>29</sup> Additional procedural as well as substantive issues have been raised, as more fully discussed infra.<sup>30</sup>

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Mountain Oversight Program Non-Profit Corporation in Support of its Petition to Intervene as a Full Party (Feb. 24, 2009) [TSO Reply]; Caliente Hot Springs Resort LLC's (CHS) Reply to U.S. Department of Energy's (DOE) Answer to CHS' Petition to Intervene (Feb. 23, 2009) [Caliente Reply].

<sup>25</sup> See Native Community Action Council's Motion for Extension of Time (Feb. 24, 2009); The Timbisha Shoshone Tribe's Amended Motion for Extension of Time and Finding of Good Cause for Late Filed Motion (Feb. 26, 2009); CAB Order (Granting Motion for Extension of Time) (Feb. 25, 2009) (unpublished); CAB Order (Granting Motion for Extension of Time) (Mar. 3, 2009) (unpublished); Petition to Intervene by Native Community Action Council (Mar. 11, 2009) (subsequently renamed Reply of the Native Community Action Council to the U.S. Department of Energy's Answer to its Petition to Intervene as a Full Party) [NCA Reply]; Reply to NRC Staff and DOE Answers to Timbisha Shoshone Tribes' Motion to Intervene as a Full Party (Mar. 11, 2009) [TIM Reply].

<sup>26</sup> Reply of the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation ("TOP") to the NRC Staff Answer to TOP's Motion for Leave to File an Amended Petition and Amended Petition (Mar. 27, 2009) [TSO Reply to NRC Staff Answer to TSO Amended Petition]; Reply of the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation ("TOP") Motion for Leave to File an Amended Petition and Amended Petition (Apr. 3, 2009).

<sup>27</sup> State of Nevada's Motion to Amend Petition to Intervene as a Full Party (Jan. 16, 2009) [Nevada Motion to Amend].

<sup>28</sup> Answer of the State of Nevada to the Nuclear Energy Institute's Petition to Intervene (Feb. 9, 2009).

<sup>29</sup> The Nuclear Energy Institute's Motion to Strike Nevada's Answer to the Nuclear Energy Institute's Petition to Intervene (Feb. 13, 2009). It is not necessary to decide whether Nevada was entitled to file an answer to NEI's petition. As set forth infra, CAB-03 finds that NEI has standing and should be admitted as a party. Although CAB-03 does not admit two of NEI's nine contentions, that decision rests solely on grounds presented in the answers of DOE and the NRC Staff. NEI's motion to strike the Nevada NEI Answer is therefore moot.

<sup>30</sup> See, e.g., Section VIII infra.

On February 9, 2009, the Chief Administrative Judge designated CAB-01 to conduct the first prehearing conference pursuant to 10 C.F.R. § 2.1021,<sup>31</sup> which, on March 12, 2009, CAB-01 conducted by telephone.<sup>32</sup> On March 20, 2009, CAB-01 issued an order regarding that prehearing conference.<sup>33</sup> The three CABs heard oral argument on the admissibility of contentions in Las Vegas, Nevada on March 31 through April 2, 2009.

## II. KEY CRITERIA

Anyone who wishes to intervene as a party in this proceeding must: (1) establish that it has standing; (2) be able to demonstrate substantial and timely LSN compliance; and (3) proffer at least one admissible contention.<sup>34</sup>

### A. Standards Governing Standing

In this unique proceeding, the Commission has conferred standing as of right on certain parties. Pursuant to 10 C.F.R. § 2.309(d)(2)(iii), intervention is permitted by the State and local governmental body (county, municipality or other subdivision) in which the geologic repository operations area (GROA) is located, and by any affected federally-recognized Indian Tribe (AIT), as defined in 10 C.F.R. Part 63, if the contention admission requirements in 10 C.F.R. § 2.309(f) are satisfied with respect to at least one contention. Additionally, in the Notice of Hearing, the Commission clarified that any “affected unit of local government” (AULG), as defined in section 2 of the Nuclear Waste Policy Act of 1982, as amended (NWPA),<sup>35</sup> need not address

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<sup>31</sup> Chief Administrative Judge Order (Designating CAB01 to Conduct Conference) (Feb. 9, 2009) (unpublished).

<sup>32</sup> Tr. at 1-62.

<sup>33</sup> CAB Order (Regarding Telephonic First Prehearing Conference) (Mar. 20, 2009) (unpublished).

<sup>34</sup> 10 C.F.R. §§ 2.309(a), 2.1012(b).

<sup>35</sup> 42 U.S.C. §§ 10101-10270.

standing, but rather shall be considered a party provided that it files at least one admissible contention in accordance with 10 C.F.R. § 2.309(f).<sup>36</sup>

Otherwise, as more fully discussed below in connection with specific petitioners, a petition to intervene must provide information supporting the petitioner's claim to standing, including: (1) the nature of the petitioner's right under the governing statutes to be made a party; (2) the nature of the petitioner's interest in the proceeding; and (3) the possible effect of any decision or order on the petitioner's interest.<sup>37</sup> In determining whether an individual or organization should be granted party status "as of right," the NRC applies judicial standing concepts that require a participant to establish: (1) it has suffered or will suffer "a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statute[s]" (e.g., the Atomic Energy Act of 1954 (AEA),<sup>38</sup> the National Environmental Policy Act of 1969 (NEPA)<sup>39</sup>); (2) the injury is fairly traceable to the challenged action; and (3) the injury is "likely to be redressed by a favorable decision."<sup>40</sup>

An organization seeking to intervene in a representational capacity must:

(1) demonstrate that the licensing action will affect at least one of its members; (2) identify that member by name and address; and (3) show that it is authorized by that member to request a hearing on his or her behalf.<sup>41</sup> Additionally, the member must qualify for standing in his or her own right, and the interests that the organization seeks to protect must be germane to its own

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<sup>36</sup> 73 Fed. Reg. at 63,031.

<sup>37</sup> 10 C.F.R. § 2.309(d)(1).

<sup>38</sup> 42 U.S.C. §§ 2011-2297.

<sup>39</sup> Id. §§ 4321-4347.

<sup>40</sup> Georgia Inst. of Tech. (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995) (reciting standards for judicial standing).

<sup>41</sup> Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

purpose.<sup>42</sup> Neither the petitioner's contentions nor the requested relief, however, must require the participation of an individual member in the proceeding.<sup>43</sup>

In determining whether a petitioner has established standing, the Commission has directed us to "construe the petition in favor of the petitioner."<sup>44</sup> In this unique proceeding, however, the Commission's Notice of Hearing, as well as 10 C.F.R. § 2.309(a), also directs us, in ruling on petitions to intervene, to "consider any failure of the petitioner to participate as a potential party in the pre-license application phase under 10 C.F.R. Part 2, Subpart J."<sup>45</sup> Additionally, under 10 C.F.R. § 2.1012(b)(1), a petitioner may not be granted party status if it cannot demonstrate substantial and timely compliance with the requirements in 10 C.F.R. § 2.1003 concerning the availability of documentary material on the LSN.

#### B. Compliance with LSN Requirements

The obligations and timetable for the production of documentary material on the LSN by DOE and the NRC Staff (both parties) and by the potential parties (now petitioners) are outlined in 10 C.F.R. § 2.1003. The definition of "documentary material" is set forth in 10 C.F.R. § 2.1001. The regulations also require that each party or potential party continue to supplement the production of its documentary material on the LSN.<sup>46</sup>

In addition to each party's or potential party's responsibilities under section 2.1003, section 2.1009(a) provides, inter alia, that each party or potential party shall establish specified procedures for implementing its LSN production. Section 2.1009(b) requires a certification to the Pre-License Application Presiding Officer (PAPO) Board that the party or potential party has complied with the implementation procedures of section 2.1009(a)(2) and that "to the best of his

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<sup>42</sup> Consumers Energy Co. (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007).

<sup>43</sup> Id.

<sup>44</sup> Georgia Tech, CLI-95-12, 42 NRC at 115.

<sup>45</sup> 73 Fed. Reg. at 63,030.

<sup>46</sup> 10 C.F.R. § 2.1003(e).

or her knowledge, the documentary material specified in section 2.1003 has been identified and made electronically available.”<sup>47</sup>

In its Second Case Management Order and its Revised Second Case Management Order, the PAPO Board implemented a monthly supplementation and certification requirement with respect to LSN production by the parties and potential parties.<sup>48</sup> The RSCMO and all subsequent PAPO case management orders now have been adopted by the CABs.<sup>49</sup>

Pursuant to 10 C.F.R. § 2.1012(b)(1), a petitioner must be able to demonstrate substantial and timely compliance with the above requirements before being granted party status in the HLW proceeding. In reviewing a petitioner’s compliance, the Boards also must find that a petitioner has complied “with all applicable orders of the [PAPO Board].”<sup>50</sup> In the event a petitioner is found not to be in substantial and timely compliance with the LSN requirements, section 2.1012(b)(2) allows that petitioner to request party status upon a subsequent showing of compliance, although any grant of a request is “conditioned on accepting the status of the proceeding at the time of admission.”<sup>51</sup> In addition, 10 C.F.R. § 2.309(a) provides that, in ruling on intervention petitions in the HLW proceeding, the Boards are to “consider any failure of the petitioner to participate as a potential party in the pre-license application phase under subpart J of this part.”<sup>52</sup>

DOE maintains that section 2.1012(b)(1) requires the petitioner, in its initial petition, affirmatively to demonstrate and to substantiate with factual support, apparently in affidavit form

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<sup>47</sup> Id. § 2.1009(b).

<sup>48</sup> PAPO Board Second Case Management Order (Pre-License Application Phase Document Discovery and Dispute Resolution) (July 8, 2005) at 21-22 (unpublished) [SCMO]; PAPO Board Revised Second Case Management Order (Pre-License Application Phase Document Discovery and Dispute Resolution) (July 6, 2007) at 21 (unpublished) [RSCMO].

<sup>49</sup> See CAB Case Management Order #1 (Jan. 29, 2009) at 2 (unpublished).

<sup>50</sup> 10 C.F.R. § 2.1012(c).

<sup>51</sup> Id. § 2.1012(b)(2).

<sup>52</sup> Id. § 2.309(a).

(although DOE does not definitively delineate the type of factual support necessary), that it has complied with the LSN requirements.<sup>53</sup> DOE's position, however, is contrary to the plain language of the regulation.

Section 2.1012(b)(1) does not require an affirmative demonstration of compliance in an intervention petition. Instead, the regulation focuses on a petitioner's ability to demonstrate compliance, rather than mandating when the demonstration must be made or outlining the manner in which the demonstration must occur. Section 2.1012(b)(1) states:

A person, including a potential party given access to the Licensing Support Network under this subpart, may not be granted party status under § 2.309, or status as an interested governmental participant under § 2.315, if it cannot demonstrate substantial and timely compliance with the requirements of § 2.1003 at the time it requests participation in the HLW licensing proceeding under § 2.309 or § 2.315.<sup>54</sup>

Although DOE places emphasis on the phrase "at the time it requests participation in the HLW licensing proceeding" to support its view that petitioners must make an affirmative demonstration of compliance in their initial petitions, this phrase must be read in context. Because this provision includes the phrase "if it cannot," it is clear that the "at the time it requests participation" language serves as a cut-off for the time period within which to judge the petitioner's compliance, not the time the petitioner must demonstrate its compliance. Thus, contrary to DOE's argument, the time to judge a petitioner's compliance cannot come before the petitioner has filed its reply to any DOE and NRC Staff answers – the end point of the petitioner's request for participation as a party. Any other reading of section 2.1012(b) not only would ignore the plain language of the regulation but would force the petitioner into the untenable position of responding to a challenge that is yet to be made (or one that might never be made).

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<sup>53</sup> See, e.g., DOE Nevada Answer at 14-16.

<sup>54</sup> 10 C.F.R. § 2.1012(b)(1) (emphasis added).

In addition, section 2.1012(c), which describes the finding the Boards must make regarding a petitioner's compliance with the LSN requirements, is similarly silent on, and in no way inconsistent with, our construction of section 2.1012(b)(1) regarding the timing and manner in which a petitioner must demonstrate its compliance. The section simply provides that "[t]he Presiding Officer shall not make a finding of substantial and timely compliance pursuant to paragraph (b) of this section for any person who is not in compliance with all applicable orders of the [PAPO] designated pursuant to § 2.1010."<sup>55</sup>

Even assuming that the language of section 2.1012 were not clear and thus a review of the regulatory history were necessary, DOE has not cited any regulatory history, nor can the Boards find any, that supports its position. Indeed, by not objecting to the petitions on this ground, the NRC Staff seemingly agrees that the showing required under section 2.1012 is not as DOE would have it. The NRC Staff takes issue only with: (1) Caliente's failure to participate in the PAPO proceeding and failure to make any documentary material available on the LSN, and (2) TIM's failure to file with the PAPO Board a certification of compliance.<sup>56</sup>

Moreover, as Nevada points out in its reply to DOE's answer, DOE applies inconsistently its view that LSN compliance must be demonstrated in the intervention petition.<sup>57</sup> For example, DOE does not even challenge the LSN compliance of some petitioners that did not assert compliance in their petitions, yet it challenges the substance of Nevada's assertions of compliance in its petition.<sup>58</sup> Further, not only does DOE fail to challenge the lack of an LSN compliance assertion in some petitions, it also makes the affirmative statement in some of its answers that it "has no reason to believe that the [petitioners] are not in substantial and timely

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<sup>55</sup> Id. § 2.1012(c).

<sup>56</sup> See NRC Staff Answer at 34.

<sup>57</sup> See Nevada DOE Reply at 13-15.

<sup>58</sup> Compare DOE Nevada 4 Counties Answer at 2, and Nevada 4 Counties Petition (no mention of LSN compliance), with DOE Nevada Answer at 14-28, and Nevada Petition at 4 (asserting LSN compliance).

compliance with their LSN obligations at this time.”<sup>59</sup> In light of DOE’s explicit position that a petitioner’s demonstration of LSN compliance must be made in the intervention petition, its affirmative statement that it has no reason to believe that a petitioner is not in substantial and timely compliance gives its more stringent demands a hollow ring.

Accordingly, the Boards are not persuaded by DOE’s interpretation of the LSN regulations. Nothing in the regulations requires a petitioner to demonstrate its compliance in the initial petition. Whether a petitioner has met the regulatory requirements for LSN compliance, however, is a proper subject for challenge in an answer to a petition.<sup>60</sup> Once raised in the answer, a petitioner then has the opportunity to respond to challenges to its LSN compliance in the reply.<sup>61</sup> If such a challenge is not raised in the answer, the petitioner does not need to do anything. Indeed, at oral argument, DOE appeared to abandon its argument and concede that a petitioner need not affirmatively demonstrate in its petition that it has complied with the requirements of the LSN.<sup>62</sup>

The question remains as to what is required to “demonstrate substantial and timely compliance” with the LSN requirements when challenged. DOE argues, at least with respect to Nevada’s petition, that Nevada has not provided factual support, “by affidavit or otherwise,” to substantiate its demonstration of substantial and timely compliance.<sup>63</sup> DOE, however, provides

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<sup>59</sup> DOE Nevada 4 Counties Answer at 2. This statement is also made with regard to the petitions of Nye County and NEI, whose petitions also appear to lack an affirmative assertion of compliance with the LSN requirements. Compare DOE Nye Answer at 2, and DOE NEI Answer at 2, with Nye Petition, and NEI Petition. For an example of DOE’s language with regard to a petition challenged by DOE that is silent on LSN compliance, see DOE Inyo Answer at 4-5 (“Inyo County’s Petition is entirely silent about its LSN obligations. Inyo County has thus failed altogether to address this threshold requirement for intervention, and the Board therefore cannot find that Inyo County is in substantial and timely compliance in light of the County’s silence.”).

<sup>60</sup> See 10 C.F.R. § 2.309(h)(1).

<sup>61</sup> See id. § 2.309(h)(2).

<sup>62</sup> See Tr. at 692-93.

<sup>63</sup> DOE Nevada Answer at 16.

no support, either by interpreting the language of the regulations or citing regulatory history, for this argument, nor can the Boards find any.<sup>64</sup> Although the word “demonstrate” appears several times in 10 C.F.R. Part 2, no definition is provided. In instances where the Commission expects that the demonstration be accompanied by factual support, the Commission has so expressly stated. For example, the word “demonstrate” appears in section 2.326(a)(3) for what is required of a movant in filing a motion to reopen. The factual support requirement, however, is specifically, and separately, addressed in section 2.326(b). Therefore, as it did in other sections of Part 2, if the Commission required factual support or affidavits for demonstrating substantial and timely compliance under section 2.1202(b)(1), it presumably would have expressly demanded it.

Hence, when its compliance is challenged, a petitioner need only state in its reply that it has complied with the LSN requirements.<sup>65</sup> The regulations and the PAPO Board’s implementation of the LSN requirements already set forth the context of this statement – the initial and monthly supplemental certifications of compliance.<sup>66</sup> Pursuant to 10 C.F.R. § 2.1009(b), the certification should be a straightforward statement<sup>67</sup> that procedures have been

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<sup>64</sup> See id.

<sup>65</sup> See 10 C.F.R. § 2.304(d)(1) (providing that the signer makes the representations in 10 C.F.R. § 2.304(d) that:

[t]he signature of a person signing a pleading or other similar document submitted by a participant is a representation that the document has been subscribed in the capacity specified with full authority, that he or she has read it and knows the contents, that to the best of his or her knowledge, information, and belief the statements made in it are true, and that it is not interposed for delay.).

<sup>66</sup> See id. §§ 2.1003(e), 2.1009(b); SCMO at 21-22; RSCMO at 21; see also Section V.A infra.

<sup>67</sup> U.S. Dep’t of Energy (High-Level Waste Repository), LBP-04-20, 60 NRC 300, 339 (2004) (noting that the NRC Staff’s certification of compliance, in contrast with DOE’s then-deficient certification of compliance, contained “[n]o caveats. No cutoff date. Just a straightforward certification of compliance,” just a simple statement that “documentary material specified in 10 C.F.R. § 2.1003 has been identified and made electronically available.” (internal citation omitted)).

“establish[ed] . . . to implement the requirements in § 2.1003,”<sup>68</sup> “and that to the best of [the certifying individual’s] knowledge, the documentary material specified in § 2.1003 has been identified and made electronically available.”<sup>69</sup> In its August 31, 2004 Memorandum and Order granting Nevada’s motion to strike DOE’s certification, the PAPO Board found that the initial certification requirement embodied a good faith standard – i.e., that the parties or potential parties have made every reasonable effort to produce all of their documentary material.<sup>70</sup>

The PAPO Board carried forward that good faith standard in its RSMCO implementing a monthly supplementation and certification requirement with regard to LSN document production. In mandating monthly supplementation, the PAPO Board explicitly stated that “[e]ach potential party shall make a diligent good faith effort to include all after-created and after-discovered documents as promptly as possible in each monthly supplementation of documentary material . . . and shall file a certification to that effect with the PAPO Board when the monthly supplement is made.”<sup>71</sup> Thus, the PAPO Board Order recognized that there necessarily would be a lag-time between the creation or belated discovery of documentary material and any supplementation and certification because of the nature of the process each party or petitioner would need to undertake with respect to its particular document review system. Accordingly, the PAPO Board called for the process to be completed as promptly as possible.

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<sup>68</sup> 10 C.F.R. § 2.1009(a)(2).

<sup>69</sup> Id. § 2.1009(b); see also U.S. Dep’t of Energy, LBP-04-20, 60 NRC at 313: [T]he regulations do not prescribe any particular wording for the certification. The regulations simply require each potential party to “[e]stablish procedures to implement the requirements in § 2.1003,” and to have a “responsible official . . . certify to the [PAPO Board] that the procedures . . . have been implemented, and that to the best of his or her knowledge, the documentary material specified in § 2.1003 has been identified and made electronically available.” (internal citations omitted).

<sup>70</sup> U.S. Dep’t of Energy, LBP-04-20, 60 NRC at 314-15.

<sup>71</sup> RSCMO at 21. The RSCMO defined “potential party” to include what are now all petitioners and parties. RSCMO at 5; see also PAPO Board Fifth Case Management Order (Supplementation, Correction, and Changing of Privilege Logs) (Nov. 1, 2007) at 3 (unpublished) [FCMO].

Further, by including “after-discovered documents” in the supplementation provision, the PAPO Board necessarily recognized that no document location and production system is perfect, that mistakes would be made, and that those mistakes would need to be corrected. It imposed, therefore, a standard of “diligent good faith effort” on the parties and petitioners, not a requirement of perfection.<sup>72</sup> Moreover, the PAPO Board did not impose, just as the regulations do not include, a certification or supplementation requirement either where a petitioner has no documentary material to make available on the LSN at the time for initial certification or where it has nothing to supplement. (Of course, an affirmative statement that the petitioner has no documentary material to make available on the LSN with regard to either an initial or supplemental production, if such be the case, must be set forth in the petitioner’s reply if its compliance is challenged.) In summary, the initial and monthly supplemental certifications embody the complete set of obligations with regard to a petitioner’s LSN compliance – i.e., the establishment of procedures for the review and production of documentary material, the review and initial production of documentary material, and the review and monthly supplemental production of documentary material – all according to a good faith standard.

Finally, it should be noted that, in a series of case management orders, the PAPO Board put in place a process for resolving LSN document disputes between and among the petitioners and parties involving the various categories of privilege claims and documents claimed to contain sensitive unclassified information.<sup>73</sup> Other than motions to strike the initial certifications of various petitioners filed by DOE,<sup>74</sup> and the motions to strike the certifications of DOE filed by

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<sup>72</sup> Compare DOE Nevada Answer at 19-25 (criticizing Nevada’s call memos), with Nevada DOE Reply at 36-39 (criticizing DOE’s call memos).

<sup>73</sup> See SCMO; RSCMO; PAPO Board Third Case Management Order (Aug. 30, 2007) (unpublished); PAPO Board Fourth Case Management Order (Concerning Electronic Filing, DDMS, Safeguards Information, and Other Items) (Oct. 5, 2007) at 5-8 (unpublished); FCMO.

<sup>74</sup> See The Department of Energy’s Motion to Strike January 16, 2008 Certification of Clark County (Jan. 28, 2008); The Department of Energy’s Motion to Strike the January 17, 2008 Licensing Support Network Certification by the State of Nevada (Jan. 28, 2008); see also DOE’s  
(continued)

Nevada,<sup>75</sup> no contested LSN document discovery disputes were brought before the PAPO Board for resolution. Accordingly, with the exception of any newly raised matters in the answers of DOE and the NRC Staff that are addressed in this decision, there are no petitioners who are “not in compliance with all applicable orders of the [PAPO Board].”<sup>76</sup>

Similarly, because in developing case management orders for resolving LSN document disputes the PAPO Board generally mandated the participation of only DOE, the NRC Staff, and Nevada, and merely invited other petitioners to participate,<sup>77</sup> the failure of any such petitioner to participate voluntarily with respect to any or all of the PAPO Board process was not inimical to the development of case management orders. Thus, the consideration of such participation in ruling upon any intervention petitions – called for by 10 C.F.R. § 2.309(a) – is, in the circumstances presented, not a factor.

### C. Standards Governing Contention Admissibility

The Commission’s regulations establish the requirements for an admissible contention. The Commission has said that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.”<sup>78</sup>

An admissible contention must: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention;

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Motion to Strike 1/14/2008 Certification of the City of Las Vegas (Jan. 24, 2008) (The City of Las Vegas did not file an intervention petition in this proceeding.).

<sup>75</sup> See Nevada’s Motion to Strike the Department of Energy’s LSN Certification and for Related Relief (July 12, 2004); Motion to Strike DOE’s October 19, 2007 LSN Recertification and to Suspend Certification Obligations of Others Until DOE Validly Recertifies (Oct. 29, 2007).

<sup>76</sup> 10 C.F.R. § 2.1012(c).

<sup>77</sup> See PAPO Board Order (Scheduling Case Management Conference) (Apr. 13, 2005) at 1 (unpublished); PAPO Board Order (Scheduling Case Management Conference) (Apr. 19, 2007) at 2 (unpublished).

<sup>78</sup> Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

(3) demonstrate that the issue raised is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (5) provide a concise statement of the alleged facts or expert opinions that support the petitioner's position and on which the petitioner intends to rely at the hearing, including references to the specific sources and documents on which the petitioner intends to rely; and (6) provide sufficient information to show that a genuine dispute exists on a material issue of law or fact, including references to specific portions of the application that the petitioner disputes or, if the application is alleged to be deficient, the identification of such deficiencies and the supporting reasons for this allegation.<sup>79</sup>

Additionally, an admissible contention cannot challenge an existing Commission regulation. Absent a waiver, "no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding."<sup>80</sup> This rule bars contentions that: (1) advocate more or less stringent requirements than the NRC rules impose; (2) otherwise seek to litigate a generic determination that the Commission has established by rulemaking; or (3) raise a matter that is or is about to become the subject of rulemaking.<sup>81</sup>

Thus, an admissible contention must raise an issue that is both within the scope of the proceeding (generally defined by the hearing notice) and material to the findings the NRC must

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<sup>79</sup> 10 C.F.R. § 2.309(f)(1)(i)-(vi).

<sup>80</sup> Id. § 2.335(a). A waiver "can be granted only in unusual and compelling circumstances." Pub. Serv. Co. of New Hampshire (Seabrook Station, Units 1 & 2), ALAB-895, 28 NRC 7, 16 (1988), aff'd, CLI-88-10, 28 NRC 573, 597, recons. denied, CLI-89-3, 29 NRC 234 (1989) (internal quotation marks and citations omitted). "The sole ground for petition of waiver or exception is that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation . . . would not serve the purposes for which the rule or regulation was adopted." 10 C.F.R. § 2.335(b). The Commission requires that any request for such waiver or exception be accompanied by an affidavit that identifies "with particularity the special circumstances alleged to justify the waiver or exception requested." Id.

<sup>81</sup> Private Fuel Storage, L.L.C. (Indep. Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179 (1998) (providing a summary of Commission precedent).

make to support the action involved.<sup>82</sup> A contention that attacks applicable statutory requirements, challenges the basic structure of the NRC's regulatory process, or merely expresses generalized policy grievances is not appropriate for a board hearing.<sup>83</sup>

Likewise, a petitioner must allege facts or provide expert opinion sufficient to establish a "minimal basis [that indicates] the potential validity of the contention."<sup>84</sup> The Commission's rules "bar contentions where petitioners have only 'what amounts to generalized suspicions, hoping to substantiate them later.'"<sup>85</sup> Although a petitioner does not have to prove its contention at the admissibility stage,<sup>86</sup> "[m]ere 'notice pleading' is insufficient."<sup>87</sup> The necessary factual support, however, "need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion."<sup>88</sup>

Additionally, in ruling on the admissibility of individual contentions, each CAB has been mindful of the Advisory Pre-License Application Presiding Officer (APAPO) Board's Memorandum and Order dated June 20, 2008.<sup>89</sup> Among other things, the APAPO Board Order directed petitioners to "strive to frame narrow, single-issue contentions" that should be

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<sup>82</sup> 10 C.F.R. § 2.309(f)(1)(iii), (iv).

<sup>83</sup> Philadelphia Elec. Co. (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 20-21 & n.33 (1974).

<sup>84</sup> Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989).

<sup>85</sup> Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-03-17, 58 NRC 419, 424 (2003) (quoting Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 338 (1999)).

<sup>86</sup> Private Fuel Storage, CLI-04-22, 60 NRC at 139.

<sup>87</sup> Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003).

<sup>88</sup> 54 Fed. Reg. at 33,171.

<sup>89</sup> U.S. Dep't of Energy (High-Level Waste Repository), LBP-08-10, 67 NRC 450 (2008).

“sufficiently specific as to define the relevant issues for eventual rulings on the merits, and not require the parties or [CABs] to devote substantial resources to narrow or to clarify them.”<sup>90</sup>

In light of this instruction, as well as the limited time in which the CABs have been directed by the Commission to complete their review of numerous contentions, each CAB has refrained from attempting to restructure any contention. Rather, each CAB has simply ruled whether each contention before it is either admissible or inadmissible, in accordance with the Commission’s regulations.

As more fully explained infra, the granting of petitions and admission of contentions is only the first step in managing the HLW proceeding. Many other steps will be taken before any contention is set for hearing.

Among other things, briefing schedules will be established for admitted legal issue contentions, the resolution of which may ultimately determine the outcome of related factual contentions. The CABs contemplate that many contentions that are admitted in this initial phase might have to be narrowed or otherwise restructured at later stages in the proceeding – particularly where petitioners did not strictly adhere to the “single-issue” rule but nonetheless proffered contentions that contain sufficient information to satisfy the Commission’s regulations. Likewise, many admitted contentions may subsequently be consolidated or grouped for hearings on the merits.

### III. OVERARCHING ISSUES

In addition to the foregoing requirements, and in light of the arguments that DOE and the NRC Staff repeatedly raise in response to nearly all proffered contentions, several issues concerning the admissibility of contentions merit further discussion.

#### A. Special Requirements for NEPA Contentions

The Commission has by regulation imposed special requirements on contentions in this proceeding that involve NEPA.<sup>91</sup> DOE contends that no petitioner has satisfied these pleading

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<sup>90</sup> Id. at 454.

standards for any contention.<sup>92</sup> The NRC Staff contends that, save for two environmental contentions, NYE-NEPA-001 and JTS-NEPA-009,<sup>93</sup> there are no contentions that satisfy these standards.<sup>94</sup>

DOE and the NRC Staff read the Commission's regulations too narrowly. Fairly read – and especially when applied consistent with the decision in Nuclear Energy Institute, Inc. v. Environmental Protection Agency,<sup>95</sup> as the Commission has directed<sup>96</sup> – the regulations concerning NEPA contentions impose two relevant requirements beyond those that apply to all contentions. First, each such contention must be supported by “one or more affidavits which set forth factual and/or technical bases.”<sup>97</sup> Second, the affidavit or affidavits must set forth “significant and substantial” grounds for the claim that it is not practicable to adopt the EIS for the proposed repository prepared by DOE.<sup>98</sup> As reflected in the rulings of individual Boards, all admitted NEPA contentions satisfy these additional requirements.

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<sup>91</sup> See 10 C.F.R. § 51.109.

<sup>92</sup> See, e.g., DOE Nevada Answer at 4 (stating that [i]n the case of its NEPA contentions, Nevada fails to address any of the mandatory requirements of 10 C.F.R. § 51.109 and 10 C.F.R. § 2.326 [and] did not submit the affidavit of a qualified expert in support of any of its NEPA contentions that separately addresses each of the factors under § 2.326, including a demonstration that its contention, if proven to be true, would or would likely result in a materially different outcome in the proceeding.)

<sup>93</sup> As explained Section X.B, infra, TSO-NEPA-001 in TSO's amended petition has been designated as JTS-NEPA-009.

<sup>94</sup> NRC Staff Answer at 1625; NRC Staff Answer to TSO Amended Petition at 11-13.

<sup>95</sup> 373 F.3d 1251, 1313-14 (D.C. Cir. 2004) [NEI v. EPA].

<sup>96</sup> 73 Fed. Reg. at 63,031. The Commission also directed that the NEPA contention admissibility requirements should be applied consistent with certain developments subsequent to the NEI v. EPA decision, and that the CABs “should treat as a cognizable ‘new consideration’ an attack on the Yucca Mountain environmental impact statements based on significant and substantial information that, if true, would render the statements inadequate.” Id.

<sup>97</sup> See 10 C.F.R. § 51.109(a)(2).

<sup>98</sup> See id. § 51.109(c)(2).

1. Background

a. Nuclear Waste Policy Act

Section 114(f)(4) of the NWPA,<sup>99</sup> provides that “[a]ny [EIS] prepared in connection with a repository proposed to be constructed by [DOE] under this subtitle shall, to the extent practicable, be adopted by the [NRC] in connection with the issuance by the [NRC] of a construction authorization and license for such repository.”<sup>100</sup> The statute further provides that “[t]o the extent such statement is adopted by the [NRC], such adoption shall be deemed to also satisfy the responsibilities of the [NRC] under [NEPA] and no further consideration shall be required, except that nothing in this subsection shall affect any independent responsibilities of the [NRC] to protect public health under the [AEA].”<sup>101</sup>

b. Commission Rulemaking

In 1988-89, the Commission conducted a rulemaking to consider the standards and procedures that should be used in licensing proceedings to determine whether the NRC’s adoption of DOE’s EIS is practicable.<sup>102</sup> The Commission determined that the NWPA had altered the NRC’s ordinary NEPA responsibilities so as to narrow the scope of the NRC’s independent review of environmental issues that were already addressed by DOE in its EIS. As summarized by the Commission:

[The Commission] continues to emphasize its view that its role under NWPA is oriented toward health and safety issues and that, in general, nonradiological environmental issues are intended to be resolved in advance of NRC licensing decisions through the actions of [DOE], subject to Congressional and judicial review in accordance with NWPA and other applicable law. The Commission anticipates that many environmental questions would have been, or at least

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<sup>99</sup> NWPA § 114(f)(4), 42 U.S.C. § 10134(f)(4).

<sup>100</sup> Id. (emphasis added).

<sup>101</sup> Id.

<sup>102</sup> See Proposed Rule, NEPA Review Procedures for Geologic Repositories for High-Level Waste, 53 Fed. Reg. 16,131 (May 5, 1988); Final Rule, NEPA Review Procedures for Geologic Repositories for High-Level Waste, 54 Fed. Reg. 27,864 (July 3, 1989).

could have been, adjudicated in connection with an [EIS] prepared by DOE, and such questions should not be reopened in proceedings before NRC.<sup>103</sup>

Under the Commission's final rule, the NRC Staff was required to present its position on whether it is practicable to adopt DOE's EIS without supplementation.<sup>104</sup> Under section 51.109(a)(2), parties then were to be afforded the opportunity to submit contentions asserting that it is not practicable to adopt the DOE EIS:

Any other party to the proceeding who contends that it is not practicable to adopt the DOE [EIS], as it may have been supplemented, shall file a contention to that effect within thirty (30) days after the publication of the notice of hearing in the Federal Register. Such contention must be accompanied by one or more affidavits which set forth factual and/or technical bases for the claim that, under the principles set forth in paragraphs (c) and (d) of this section, it is not practicable to adopt the DOE [EIS], as it may have been supplemented. The presiding officer shall resolve disputes concerning adoption of the DOE [EIS] by using, to the extent possible, the criteria and procedures that are followed in ruling on motions to reopen under § 2.326 of this chapter.<sup>105</sup>

The relevant criteria governing the practicability of adoption are set forth in section 51.109(c):

The presiding officer will find that it is practicable to adopt any [EIS] prepared by [DOE] in connection with a geologic repository proposed to be constructed under Title I of the [NWPA], unless:

- (1)(i) The action proposed to be taken by the [NRC] differs from the action proposed in the license application submitted by [DOE]; and (ii) The difference may significantly affect the quality of the human environment;
- or (2) Significant and substantial new information or new considerations render such [EIS] inadequate.<sup>106</sup>

The criteria concerning motions to reopen, which are incorporated in section

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<sup>103</sup> 54 Fed. Reg. at 27,865.

<sup>104</sup> See id. at 27,868; see also 10 C.F.R. § 51.109(a)(1).

<sup>105</sup> 10 C.F.R. § 51.109(a)(2). In 2004, section 51.109(a)(2) was revised to reference a new section number for motions to reopen, as part of the Commission's overall revision of the rules of practice for adjudicatory hearings. See 69 Fed. Reg. at 2276. The standards for reopening were not changed.

<sup>106</sup> 10 C.F.R. § 51.109(c).

51.109(a)(2) by reference, are set forth in section 2.326(a):

A motion to reopen a closed record to consider additional evidence will not be granted unless the following criteria are satisfied:

- (1) The motion must be timely. However, an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented;
- (2) The motion must address a significant safety or environmental issue; and
- (3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.<sup>107</sup>

The procedures to be followed in motions to reopen, which are likewise incorporated in section 51.109(a)(2) by reference, are set forth in the remainder of section 2.326 and include, among other things, requirements that such a motion “must be accompanied by affidavits that set forth the factual and/or technical bases for the movant’s claim that the criteria of paragraph (a) of this section have been satisfied”; that such affidavits “must be given by competent individuals with knowledge of the facts alleged, or by experts in the disciplines appropriate to the issues raised”; and that “[e]vidence contained in affidavits must meet the admissibility standards of this subpart.”<sup>108</sup>

Section 51.109 was premised on the assumption that administrative litigation at the NRC of NEPA issues concerning the repository should be limited, because parties should already have had the opportunity to litigate many of these issues in another forum.<sup>109</sup> The Commission expected that an interested person would have had an opportunity to challenge DOE’s EIS in federal court after it was used to support DOE’s recommendation of a site for the repository.<sup>110</sup>

With that expectation in mind, the regulations were designed to ensure that the environmental issues in any NRC proceeding on the proposed repository would appropriately

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<sup>107</sup> Id. § 2.326(a).

<sup>108</sup> Id. § 2.326(b).

<sup>109</sup> See 54 Fed. Reg. at 27,866-87.

<sup>110</sup> Id.

focus on issues that were new – that could not have been raised at the earlier opportunity to challenge the EIS. Accordingly, the regulations adopted in section 51.109 focus not on the entire EIS – as would be the normal NRC practice – but rather on the NRC’s decision to adopt the EIS. The regulations limit challenges to the NRC’s adoption decision to those issues that had changed from the original Application, or that were issues raising “significant and substantial new information”<sup>111</sup> that arose after the (expected) earlier opportunity to challenge the EIS.

This makes sense if parties had already had the opportunity to challenge any of the other issues regarding the EIS. Given that assumption, it also explains why the regulations direct the Boards to use the higher standards governing a motion to reopen when ruling upon the issues raised regarding adoption of the EIS – because litigation of the EIS in the NRC’s administrative proceeding was seen as reopening the record on an already litigated EIS.

c. Subsequent Events

Actual events regarding judicial review of environmental issues at Yucca Mountain, however, transpired differently than had been anticipated.

Under the NWPA, when site characterization activities are completed, DOE may recommend site approval to the President and any such recommendation must be accompanied by an EIS.<sup>112</sup> DOE submitted such an EIS and recommended the Yucca Mountain site to the President in February 2002. In accordance with section 114(a)(2) of the NWPA, the President then recommended the Yucca Mountain site to Congress.<sup>113</sup> Under sections 115 and 116 of the NWPA, the affected state (Nevada) submitted a notice of disapproval in April 2002, which was

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<sup>111</sup> 10 C.F.R. § 51.109(c)(2).

<sup>112</sup> See NWPA § 114(a)(1), 42 U.S.C. § 10134(a)(1), (f)(1).

<sup>113</sup> See NWPA § 114(a)(2), 42 U.S.C. § 10134(a)(2).

overcome by a Joint Resolution approved by Congress and signed by the President on July 23, 2002.<sup>114</sup>

As a result of these developments, DOE was required to submit an application for a construction authorization to the NRC under section 114(b) of the NWPA, irrespective of DOE's NEPA analysis.<sup>115</sup> Instead of the EIS being used to support the recommendation of Yucca Mountain as a site for a repository, there was a Joint Resolution of Congress approving the Yucca Mountain site designation.

d. NEI Decision

In NEI v. EPA, the Court of Appeals for the District of Columbia (D.C. Circuit) held that these developments rendered any challenge to the EIS's support for the Yucca Mountain site moot, and to the extent the NRC might rely upon the EIS, rendered challenges unripe because the NRC had not reached a decision regarding adopting or relying upon the EIS in a way that could have yet harmed the parties.<sup>116</sup>

The NEI v. EPA decision resulted from a complex series of events. After Congress approved the Yucca Mountain site by a Joint Resolution signed by the President, Nevada sought judicial review of: (1) DOE's decision to recommend the Yucca Mountain site to the President; (2) the President's decision to recommend the site to Congress; and (3) DOE's EIS, which had been prepared to support both recommendations.<sup>117</sup> In response, DOE argued that the Joint Resolution had rendered moot Nevada's challenges to DOE's and the President's recommendations, with the result that Nevada's claims that the EIS was inadequate could not be considered as part of the challenges to those recommendations. Further, DOE argued that,

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<sup>114</sup> Pub. L. No. 107-200, 116 Stat. 735 (2002) (codified at 42 U.S.C. § 10135 note).

<sup>115</sup> See NWPA § 114(b), 42 U.S.C. § 10134(b).

<sup>116</sup> NEI v. EPA, 373 F.3d at 1302.

<sup>117</sup> See id. at 1261-62.

insofar as the EIS might be used to support future DOE and NRC decisions, the EIS was not ripe for review because there was no final agency action affecting Nevada at that time.<sup>118</sup>

In the litigation resulting in the NEI v. EPA decision, Nevada's challenges to DOE's and the President's recommendations and to the EIS were combined with other issues raised by Nevada and other lawsuits concerning the proposed Yucca Mountain repository, including challenges to the Environmental Protection Agency's (EPA) final standards for the proposed repository.<sup>119</sup> In NEI v. EPA, the court agreed with DOE that Congress' enactment of the Joint Resolution had rendered moot issues concerning DOE's and the President's recommendation of the Yucca Mountain site.<sup>120</sup> Thus, the court held that "[i]nsofar as Nevada's instant challenge to the [EIS] is intended to reverse the decision to select the Yucca site, the challenge is moot."<sup>121</sup>

The court noted, however, the anticipated use of the EIS in future decision making related to Yucca Mountain, including its potential adoption by the NRC in its licensing proceeding, and considered whether the court should review the EIS because it might be used to support future decisions.<sup>122</sup> The court determined that the EIS was not ripe for review under the two-part test used to determine ripeness: (1) "the fitness of the issue for judicial decision"; and (2) "the hardship to the parties of withholding court consideration."<sup>123</sup>

Under the first prong of the test, the court noted that it was unclear to what extent the NRC would adopt the EIS and whether the EIS would require supplementation prior to any

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<sup>118</sup> Id. at 1312-13.

<sup>119</sup> See 373 F.3d 1251; Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 66 Fed. Reg. 32,074 (June 13, 2001).

<sup>120</sup> NEI v. EPA, 373 F.3d at 1309.

<sup>121</sup> Id. at 1312.

<sup>122</sup> See id. at 1312-13.

<sup>123</sup> Id. (citing AT&T Corp. v. FCC, 349 F.3d 692, 699 (D.C. Cir. 2003)).

adoption. The court concluded that “[o]ur review of the [EIS] therefore would benefit from postponing consideration until the [EIS] has been used to support a specific, concrete, and final decision.”<sup>124</sup>

Under the second prong of the test, the court concluded that “withholding consideration of Nevada’s substantive claims at this time imposes no hardship on Nevada . . . [because] Nevada may raise its substantive claims against the [EIS] if and when NRC or DOE makes . . . a final decision.”<sup>125</sup> In reaching this conclusion as to hardship, the court stated that “we rely on the assurances of counsel for both the NRC and DOE at oral argument that Nevada will be permitted to raise its substantive challenges to the [EIS] in any NRC proceeding to decide whether to adopt the [EIS] and in any DOE proceeding to select a transportation alternative.”<sup>126</sup>

As the court explained:

The NWPA’s mandate that the [EIS] be adopted by NRC “to the extent practicable” is intended to avoid duplication of the environmental review process. See H.R. Rep. No. 97-491, pt. 1, at 48, 53-54 (1982). But it cannot reasonably be interpreted to permit NRC to premise a construction-authorization or licensing decision upon an EIS that does not meet the substantive requirements of the NEPA or the Council on Environmental Quality’s NEPA regulations. See id. at 48 (“The Committee intends that throughout the repository development program, the Secretary and other agencies meet the general requirements and the spirit of NEPA”).<sup>127</sup>

Following oral argument, the NRC purported to clarify its position in a letter submitted to the court.<sup>128</sup> The NRC’s Office of General Counsel attempted to explain that the relevant regulations “affect[ ] issues that can be raised and litigated at NRC administrative hearings, not issues that can be raised on judicial review.”<sup>129</sup> The court said that “[t]he suggested distinction

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<sup>124</sup> NEI v. EPA, 373 F.3d at 1313.

<sup>125</sup> Id.

<sup>126</sup> Id.

<sup>127</sup> Id. at 1314.

<sup>128</sup> Id.

<sup>129</sup> Id. (alteration in original).

makes no sense.”<sup>130</sup> The court declined to accept any clarification of “Government counsel’s unequivocal representation to the court during oral argument” and firmly reiterated the court’s view that, in any event, “any substantive defects in the [EIS] clearly would be relevant to the ‘practicability’ of adopting the [EIS].”<sup>131</sup>

e. Nevada’s 2005 Petition

Thereafter, in April 2005, Nevada petitioned the Commission for rulemaking, contending that section 51.109 was at odds with the court’s ruling in NEI v. EPA.<sup>132</sup> Among other things, Nevada argued that the Commission’s regulations should be revised to clarify that the court intended for boards to consider fully NEPA contentions concerning Yucca Mountain, and that the Commission should delete section 51.109(a)(2), with the result that the admission of NEPA contentions would be guided by the same principles in 10 C.F.R. § 2.309(f).<sup>133</sup> On January 25, 2008, the Commission denied Nevada’s petition.<sup>134</sup>

In denying the petition, the Commission rejected Nevada’s argument that section 51.109(c) is inconsistent with the NEI v. EPA court’s interpretation and therefore required correction.<sup>135</sup> Rather, the Commission determined that the court itself had concluded the regulation as drafted adequately protected Nevada’s interest in raising substantive claims against the EIS in administrative proceedings:

Government counsel’s unequivocal representation to the court during oral argument that Nevada will not be foreclosed from raising substantive claims against the [EIS] in administrative proceedings comports with the terms of the regulation and reflects a reasonable and compelling interpretation. Therefore, on

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<sup>130</sup> Id.

<sup>131</sup> Id.

<sup>132</sup> See State of Nevada; Receipt of Petition for Rulemaking, 70 Fed. Reg. 47,148 (Aug. 12, 2005).

<sup>133</sup> Id. at 47,150.

<sup>134</sup> See State of Nevada; Denial of Petition for Rulemaking, 73 Fed. Reg. 5762 (Jan. 31, 2008).

<sup>135</sup> Id. at 5765.

the record at hand, there is no reason to assume that the regulation will bar consideration of Nevada's substantive claims in the relevant NRC administrative proceedings.<sup>136</sup>

Indeed, the Commission interpreted the NEI v. EPA decision as an expression of the court's satisfaction that the existing language of the regulation would allow consideration of Nevada's substantive claims:

This conclusion follows the court's explicit consideration of the language of the § 51.109(c) criteria. The court focused on the second criterion; i.e., that it might not be practicable for NRC to adopt the [EIS] if "significant and substantial new information or new considerations render such environmental impact statement inadequate." The court noted that "Government counsel assured the court that NRC will not construe the 'new information or new considerations' requirement to preclude Nevada from raising substantive claims against the [EIS] in administrative proceedings." Further, the court observed that "Nevada's claims have not been adjudicated on the merits here and presumably will not have been passed upon by any court prior to the relevant NRC proceedings. The claims thus would certainly raise 'new considerations' with regard to any decision to adopt the [EIS]." There is no need for the Commission to expend the resources needed for a rulemaking to "correct" a rule which the court gave no indication of needing correction. NRC will treat Nevada's substantive claims against the [EIS] as "new considerations" within the framework of § 51.109(c).<sup>137</sup>

The Commission thus concluded that, at a minimum, Nevada's substantive claims against the EIS must be treated as "new considerations," regardless of whether the regulations might be read to the contrary. As to the unique procedures specified in the regulations, however, the Commission declined to address them, relying upon the general principle that an agency is not required to "establish one uniform agency process for all NEPA reviews."<sup>138</sup>

The Commission therefore did not address with specificity how the unique procedures spelled out in 10 C.F.R. § 2.326 – which are directed to reopening closed records – should be reconciled with its determination that all substantive claims against the EIS will, in effect,

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<sup>136</sup> Id. at 5764-65 (quoting NEI v. EPA, 373 F.3d at 1314).

<sup>137</sup> 73 Fed. Reg. at 5765 (quoting NEI v. EPA, 373 F.3d at 1314) (internal citations and footnote omitted) (emphasis added).

<sup>138</sup> 73 Fed. Reg. at 5765.

automatically qualify as “new considerations.”<sup>139</sup> Subsequently, by letter from NRC’s Assistant General Counsel to Nevada’s counsel, the NRC Staff confirmed the treatment of NEPA claims as “new considerations” and certain related matters, but likewise did not reconcile section 2.326.<sup>140</sup>

f. Notice of Hearing

In accordance with the Commission’s ruling on Nevada’s petition, the Notice of Hearing in this proceeding provided as follows with respect to environmental contentions:

In addition to meeting NRC's regular contention admissibility requirements in 10 C.F.R. § 2.309(f), environmental contentions addressing any DOE [EIS] or supplement must also conform to the requirements and address the applicable factors outlined in 10 C.F.R. § 51.109 governing NRC's adoption of DOE's [EISs]. The requirements of section 51.109 should be applied consistent with NEI v. EPA, a court decision discussing section 51.109, and consistent with the Commission's denial of the State of Nevada's petition to amend section 51.109 and the Office of the General Counsel's subsequent letter clarifying the Commission's denial. Under 10 C.F.R. § 51.109(c), the presiding officer should treat as a cognizable “new consideration” an attack on the Yucca Mountain [EISs] based on significant and substantial information that, if true, would render the statements inadequate. Under 10 C.F.R. § 51.109(a)(2), a presiding officer considering environmental contentions should apply NRC “reopening” procedures and standards in 10 C.F.R. § 2.326 “to the extent possible.”<sup>141</sup>

2. Analysis

Taken together, the Commission’s special requirements for NEPA contentions must be applied in the following manner:

First, 10 C.F.R. § 51.109(a)(2) unambiguously requires that each factual NEPA contention “must be accompanied by one or more affidavits.” (As explained in Section III.G infra, however, a purely legal issue contention cannot logically require affidavit support, as by definition such a contention alleges no facts that require support.)

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<sup>139</sup> Id.

<sup>140</sup> Letter from Bradley W. Jones, Assistant General Counsel for the NRC, to Martin G. Malsch, counsel for Nevada (Mar. 20, 2008) (ADAMS Accession No. ML080810175).

<sup>141</sup> 73 Fed. Reg. at 63,031 (internal citations omitted).

Second, such affidavit or affidavits must set forth “factual and/or technical bases” for the claim that it is not practicable to adopt the DOE EIS.<sup>142</sup> In the present circumstances, the only relevant test for such a claim under the regulations is whether the supporting affidavit or affidavits present “[s]ignificant and substantial new information or new considerations” sufficient to “render such environmental impact statement inadequate.”<sup>143</sup> Because the Commission’s Notice of Hearing instructs the Boards to treat otherwise admissible NEPA contentions as presenting cognizable “new considerations,” however, the test is reduced to merely determining whether such affidavits present “significant and substantial information that, if true, would render the [DOE environmental] statements inadequate.”<sup>144</sup>

We need not, at this admissibility stage, further define the standard that will ultimately apply in adjudicating NEPA contentions on the merits. At this point, a petitioner does not have to prove its contentions,<sup>145</sup> and we do not adjudicate disputed facts.<sup>146</sup> It is sufficient, for example, for a petition to allege, with support in a reasoned affidavit from a competent expert, that “incomplete and inadequate [EIS] analyses of the cumulative impacts of land surface discharge of groundwater contaminated with radionuclides and other repository derived contaminants are significant deficiencies” sufficient to preclude adoption of DOE’s EIS.<sup>147</sup>

Third, in considering such environmental contentions, Boards are directed to use, “to the extent possible,” the criteria and procedures that are followed in ruling on motions to reopen a

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<sup>142</sup> 10 C.F.R. § 51.109(a)(2).

<sup>143</sup> Id. § 51.109(c)(2).

<sup>144</sup> 73 Fed. Reg. at 63,031.

<sup>145</sup> Private Fuel Storage, CLI-04-22, 60 NRC at 139.

<sup>146</sup> Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 244 (2006) (citing Mississippi Power & Light, Co. (Grand Gulf Nuclear Station, Units 1 & 2), ALAB-130, 6 AEC 423, 426 (1973)).

<sup>147</sup> See Nevada Petition at 1128.

closed record pursuant to 10 C.F.R. § 2.326.<sup>148</sup> On close examination, however, it is apparent that, in the circumstances of this proceeding, the criteria and procedures in 10 C.F.R. § 2.326 are either irrelevant or redundant.

Section 2.326(a) sets forth three criteria. The first – whether the motion is timely – is irrelevant here, as the Commission specified in the Notice of Hearing when petitions were due.<sup>149</sup> The second – whether the motion addresses a “significant safety or environmental issue” – merely duplicates the requirement in 10 C.F.R § 51.109(c)(2) and the Notice of Hearing that NEPA contentions present “significant and substantial” information.<sup>150</sup> The third – whether the proffered information would likely cause a “materially different result” – is superseded by the Commission’s direction to treat as cognizable those contentions that set forth information “that, if true, would render the [DOE environmental] statements inadequate.”<sup>151</sup>

The balance of section 2.326 sets forth procedural requirements in three subsections. Section 2.326(b) requires “affidavits that set forth the factual and/or technical bases” for satisfying the three criteria in section 2.326(a) discussed above. As noted, petitions in this proceeding are timely if filed with the Office of the Secretary on or before the date set in the Notice of Hearing, and there is no need to establish timeliness by affidavit. Section 2.326(b) also requires affidavit support to demonstrate “a significant safety or environmental issue” and the likelihood of a “materially different result.”<sup>152</sup> That obligation, however, is necessarily satisfied by competent affidavits that satisfy the requirements of 10 C.F.R. § 51.109 and the

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<sup>148</sup> 10 C.F.R. § 51.109(a)(2).

<sup>149</sup> 73 Fed. Reg. at 63,030, 63,032.

<sup>150</sup> Id. at 63,031.

<sup>151</sup> Id. The relevant “materially different result” here could not be a different outcome of the application process itself, as NEPA does not command one outcome over another. See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (“NEPA itself does not mandate particular results, but simply prescribes the necessary process.”).

<sup>152</sup> 10 C.F.R. § 2.326(a).

Notice of Hearing for affidavit support sufficient to present “significant and substantial information that, if true, would render the [DOE environmental] statements inadequate.”<sup>153</sup> (Contrary to DOE’s claims during oral argument,<sup>154</sup> the Boards are not aware of multiple standards of reliability for affidavits; all affidavits are expected to be “relevant, material, and reliable.”<sup>155</sup>) Section 2.326(c), which concerns confidential informants, and section 2.326(d), which concerns nontimely contentions, are inapplicable.

In summary, reading 10 C.F.R. § 51.109 together with the Notice of Hearing, and using the criteria and procedures set forth in 10 C.F.R. § 2.326 “to the extent possible,” we find that, in addition to the usual contention admissibility requirements set forth in section 2.309(f)(1), factual NEPA contentions must be supported by one or more competent affidavits and such affidavits must present significant and substantial information that, if true, would render the DOE environmental statements inadequate. This represents a significant additional burden, as generally contentions may, but need not necessarily, be supported by affidavits at all.<sup>156</sup> Likewise, the “significant and substantial” test prevents our admitting any contentions that merely “flyspeck” DOE’s environmental analysis, as DOE and the NRC Staff fear.<sup>157</sup>

But to impose greater burdens – as DOE and the NRC Staff apparently would prefer – cannot be squared with either our directions from the Commission or with the agencies’ representations to the D.C. Circuit in the NEI v. EPA case, in which the court relied on “the assurances of counsel for both the NRC and DOE at oral argument that Nevada will be permitted to raise substantive challenges to the [EIS] in any NRC proceeding to decide whether

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<sup>153</sup> 73 Fed. Reg. at 63,031.

<sup>154</sup> Tr. at 157.

<sup>155</sup> 10 C.F.R. §§ 2.337(a), 2.711(e).

<sup>156</sup> See id. § 2.309(f)(1).

<sup>157</sup> See, e.g., DOE Nevada Answer at 57-60; NRC Staff Answer at 1065-66, 1153-54, 1438, 1487, 1510.

to adopt the [EIS].”<sup>158</sup> This point takes on added significance because the court emphatically rejected NRC counsel’s attempt, in effect, to withdraw its representations concerning the ability of petitioners such as Nevada to raise substantive challenges to the adequacy of the EIS in future administrative proceedings.

B. Transportation-Related NEPA Contentions

As DOE correctly points out, the NRC does not have regulatory authority over DOE’s transportation of nuclear waste to the proposed repository.<sup>159</sup> DOE also correctly points out that, while the NWPA requires it to use NRC-certified casks for shipment of nuclear waste to the proposed repository, such certification requirements are governed by different regulations, and are not directly at issue in this proceeding.<sup>160</sup> DOE argues that “contentions challenging the accuracy or adequacy of DOE’s NEPA analysis of the impacts of transporting [nuclear waste] are not proper subjects for contentions in this proceeding.”<sup>161</sup> That conclusion is not correct.

As explained above, by regulation and in the Notice of Hearing, the Commission established special pleading requirements for all NEPA contentions.<sup>162</sup> The Commission did so because, under the NWPA, the NRC’s NEPA responsibilities are limited to determining whether it is practicable to adopt DOE’s environmental documents.<sup>163</sup> But the NRC’s NEPA responsibilities have not been abrogated entirely. In this proceeding, the NRC is obligated under NEPA to analyze and to disclose all environmental effects of the proposed repository, not just the effects of those portions of the repository over which the NRC has direct regulatory control. Contentions that address such environmental effects, including transportation-related

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<sup>158</sup> 373 F.3d at 1313.

<sup>159</sup> See, e.g., DOE Nevada Answer at 64-65.

<sup>160</sup> See id. at 65.

<sup>161</sup> Id. at 70.

<sup>162</sup> See Section III.A supra.

<sup>163</sup> NWPA § 114(f)(4), 42 U.S.C. § 10134(f)(4); see also 73 Fed. Reg. at 63,031.

effects, may not be dismissed at this early stage of the proceeding if they satisfy the Commission's special pleading requirements for HLW NEPA contentions.

In other words, in addition to satisfying the usual contention admissibility requirements in 10 C.F.R. § 2.309(f)(1), such factual contentions must be supported by one or more competent affidavits presenting "significant and substantial information that, if true, would render the [DOE] environmental statements inadequate."<sup>164</sup> As reflected in the rulings of individual Boards, the admitted contentions concerning transportation-related matters satisfy these NEPA requirements.

NEPA imposes upon every federal agency the duty to examine "to the fullest extent possible" the environmental consequences of any proposed federal action that might "significantly affect[ ] the quality of the human environment."<sup>165</sup> NEPA requires federal agencies to examine, to analyze, and to disclose not only direct effects, but also indirect effects that "are later in time or farther removed in distance, but are still reasonably foreseeable."<sup>166</sup> If federal agencies were free to ignore related effects that they do not directly regulate, NEPA would be meaningless. For example, no agency but EPA would be obligated to consider air pollution associated with increased traffic, as only EPA directly regulates vehicle emissions under the Clean Air Act.<sup>167</sup>

Transportation of nuclear waste is a foreseeable consequence of constructing a nuclear waste repository. As California persuasively argues, "[w]ithout transportation of the waste to it, Yucca Mountain would be just a very large, fancy, and expensive hole in a mountain."<sup>168</sup> The

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<sup>164</sup> See Section III.A *supra*; 73 Fed. Reg. at 63,031.

<sup>165</sup> NEPA § 102, 42 U.S.C. § 4332.

<sup>166</sup> 40 C.F.R. § 1508.8(b), adopted by the NRC at 10 C.F.R. § 51.14(b).

<sup>167</sup> Compare *Sierra Club v. U.S. Dep't of Transp.*, 962 F. Supp. 1037, 1045 (N.D. Ill. 1997) (EIS incomplete without analysis of effect of toll road on production of ozone in the region).

<sup>168</sup> California Reply at 25.

Commission, for example, has stated that there can be “no serious dispute” that the NRC’s environmental analysis in connection with licensing nuclear facilities should extend to “related offsite construction projects – such as connecting roads and railroad spurs.”<sup>169</sup> Likewise, there can be no serious dispute that the NRC’s NEPA responsibilities do not end at the boundaries of the proposed repository, but rather extend to the transportation of nuclear waste to the repository. The two are closely interdependent. Without the repository, waste would not be transported to Yucca Mountain. Without transportation of waste to it, construction of the repository would be irrational. Under NEPA, both must be considered.

DOE argues that the Supreme Court’s decision in Department of Transportation v. Public Citizen<sup>170</sup> renders transportation impacts outside the scope of the NRC’s NEPA responsibilities.<sup>171</sup> In Public Citizen, however, the essential decision being challenged was made by the President (who is not subject to NEPA), and implemented by an agency that, by statute, lacked discretion to undo that decision or to attach environmental conditions. The Public Citizen decision was premised on its unusual facts.<sup>172</sup> Public Citizen did not create an exemption from NEPA for the transportation-related effects of federal actions; it held only that an agency may be excused from complying with NEPA where it has no discretion to prevent, or to refuse to take, the action involved. The narrowness of the Public Citizen holding has been

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<sup>169</sup> Kansas Gas & Electric Co. (Wolf Creek Nuclear Generating Station, Unit No. 1), CLI-77-1, 5 NRC 1, 8 (1977); see also Detroit Edison Co. (Greenwood Energy Center, Units 2 & 3), ALAB-247, 8 AEC 936 (1974) (Licensing Board correctly assessed environmental impacts of transmission line routes extending ninety miles beyond the nuclear facility).

<sup>170</sup> 541 U.S. 752 (2004).

<sup>171</sup> See, e.g., DOE Nevada Answer at 1871, 1882, 1892, 1900, 1907, 1914, 1921, 1929, 1947.

<sup>172</sup> See 541 U.S. at 770.

recognized in later decisions of the Supreme Court<sup>173</sup> and other courts.<sup>174</sup> Thus, DOE's argument is not persuasive.

Nor do we find pertinent California Trout v. Schaefer,<sup>175</sup> a case that DOE cited for the first time during oral argument.<sup>176</sup> That decision addressed "the concurrent yet independent jurisdiction of two federal agencies."<sup>177</sup> That is not the situation here, where DOE is the Applicant before the NRC. Without NRC authorization, no repository will be constructed and no transportation of waste to the repository will occur. In the NWPRA, Congress expressly addressed and established the scope of the NRC's NEPA responsibilities relative to DOE in the unique circumstances of this proceeding. The Commission has implemented those defined responsibilities through regulations. While DOE would have responsibility for constructing and operating the proposed facility, the NRC is not, as DOE seemed to contend during oral argument, a "lesser agency" with "no jurisdiction" and "no responsibilities under NEPA to consider the environmental impact statements being prepared by another federal agency."<sup>178</sup>

DOE also contends that the NRC lacks jurisdiction to consider transportation-related environmental effects because DOE's transportation-related environmental documents have been, or at least could have been, challenged on direct review in a federal court of appeals.<sup>179</sup> This argument lacks merit.

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<sup>173</sup> Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 127 S. Ct. 2518, 2535 (2007).

<sup>174</sup> See, e.g., Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1213 (9th Cir. 2008); Defenders of Wildlife v. U.S. Evtl. Prot. Agency, 420 F.3d 946, 963 (9th Cir. 2005), overruled on other grounds sub nom. by Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 127 S.Ct. 2518 (2007).

<sup>175</sup> 58 F.3d 469 (9th Cir. 1995).

<sup>176</sup> See Tr. at 176, 190; Letter to the CABs from Donald J. Silverman, counsel for DOE (Apr. 14, 2009) (ADAMS Accession No. ML091040464).

<sup>177</sup> Cal. Trout v. Shaefer, 58 F.3d at 474.

<sup>178</sup> Tr. at 175.

<sup>179</sup> See, e.g., DOE Nevada Answer at 66-69.

First, under the NWPA, the NRC must undertake its own assessment of DOE's environmental documents to determine whether it is "practicable" to adopt them.<sup>180</sup> That assessment, while more limited than it would otherwise be under NEPA, nonetheless requires an independent assessment by the NRC that is not necessarily dictated by the results of direct appeals from DOE decisions. On the contrary, in promulgating special pleading requirements for environmental contentions, the Commission explained that it assumed that "many environmental questions would have been, or at least could have been, adjudicated in connection with an environment impact statement prepared by DOE."<sup>181</sup> The Commission anticipated direct appeals from DOE's environmental documents, and saw them as grounds for restricting – but not eliminating – contentions directed at the NRC's independent decision whether to adopt them.

Second, while some issues involving some of the same DOE transportation-related environmental documents may have previously been litigated in Nevada v. Department of Energy,<sup>182</sup> the DOE Application at issue here is based on a 2008 Supplemental EIS (SEIS) that obviously was not before the D.C. Circuit in 2006. Nor were many of the present petitioners. At hearings on the merits, DOE might wish to argue res judicata or collateral estoppel as to specific facts and specific petitioners, based on past or perhaps future court litigation.<sup>183</sup> That earlier DOE environmental documents were considered by the D.C. Circuit to some extent in 2006, however, is not grounds for wholesale rejection of contentions that address whether it is practicable for the NRC to adopt more recent versions of such documents.

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<sup>180</sup> NWPA § 114(f)(4), 42 U.S.C. § 10134(f)(4).

<sup>181</sup> NEPA Review Procedures for Geologic Repositories for High-Level Waste, 54 Fed. Reg. 27,864, 27,865 (July 3, 1989).

<sup>182</sup> 457 F.3d 78 (D.C. Cir. 2006).

<sup>183</sup> See Letter to the CABs from Donald J. Silverman, counsel for DOE (Apr. 14, 2009) (ADAMS Accession No. ML091040464) (advising of petitions for review filed by California and Nevada in the United States Court of Appeals for the Ninth Circuit on April 6 and 7, 2009).

We repeat: The NWPA has limited, but not eliminated, the scope of the NRC's NEPA responsibilities. The Commission has addressed those limitations by imposing special pleading requirements for all NEPA contentions. If those requirements are satisfied, Boards cannot dismiss otherwise admissible contentions at this stage of the proceeding.

C. Sufficiency of Affidavits

1. Form of Affidavits

DOE challenges Nevada's practice (and that of some other petitioners) of placing everything that it is offering in support of each of its contentions in the body of the contention itself and, then, in affidavits accompanying its contentions, having its experts adopt specified paragraphs as their own opinions. According to DOE, the requirements of section 2.309(f)(1) are not satisfied by expert affidavits that simply incorporate by reference what is in the contention itself.<sup>184</sup> Thus, DOE would have it that virtually all of Nevada's contentions must fail for this reason alone. The Boards reject DOE's argument.

To put DOE's position in context, it is useful to examine its impact on one of the many Nevada contentions that would, under DOE's thesis, fail to satisfy the requirements of section 2.309(f)(1)(v) and possibly (vi) as well. For illustrative purposes, we consider NEV-SAFETY-009.

That contention constitutes a challenge to the effect that the infiltration model used for the Yucca Mountain project applies current meteorological data for predicting future climates in the Yucca Mountain region over the course of the next 10,000 years.<sup>185</sup> According to the contention, the use of the existing model is flawed because it fails to acknowledge that atmospheric carbon dioxide concentrations are increasing at an annual rate of one to two parts per million by volume and, as a result, the climate status adopted by DOE for the next 10,000

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<sup>184</sup> DOE Nevada Answer at 47-48.

<sup>185</sup> Nevada Petition at 92.

years cannot be justified.<sup>186</sup> It follows, Nevada maintains, that the model challenged in NEV-SAFETY-009 does not comply with the regulatory requirements found in 10 C.F.R. § 63.305(c).<sup>187</sup>

With respect to the obligation to provide a concise statement of the alleged facts or expert opinions undergirding the contention,<sup>188</sup> Nevada critiques (in paragraph 5) what it asserts is the U.S. Geological Survey (USGS)-produced study (Forester et al.) on which the challenged statements in the Safety Analysis Report (SAR) are primarily based.<sup>189</sup> Nevada references different studies (e.g., Solomon S. et al.) that it says show the central hypothesis in the Forester study to be “flawed and untenable.”<sup>190</sup> The Forester study hypothesis – that “future insolation-correlated climate patterns may resemble those of past periods with similar insolation” – assertedly conflicts with the consideration that “both insolation and greenhouse gas concentrations are fundamental forcing factors of climate change.”<sup>191</sup> In addition, Nevada cites an exchange of memoranda within USGS that is taken to establish that the Forester study did not receive the external review that it was required to receive under the agency’s report policy.<sup>192</sup>

By way of expert support for the foregoing representations, as well as those advanced by Nevada with regard to the requirement that it establish the existence of a genuine dispute on a material issue of fact or law, Nevada cites, inter alia, the affidavit submitted by Dr. Michael C. Thorne. Dr. Thorne is a British environmental scientist who, according to his attached

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<sup>186</sup> Id.

<sup>187</sup> Id. at 93.

<sup>188</sup> 10 C.F.R. § 2.309(f)(1)(v).

<sup>189</sup> Nevada Petition at 94-95.

<sup>190</sup> Id. at 94.

<sup>191</sup> Id. (internal citations omitted).

<sup>192</sup> Id. at 94-95.

curriculum vitae (CV), has extensive experience in the areas of climatology germane to the issue presented by NEV-SAFETY-009. In relevant part, the affidavit states:

Within the Petition are numerous contentions, each comprised of several paragraphs. I hereby adopt as my own opinions the statements contained within Paragraph 5 of those specific contentions identified in Attachment B to this Affidavit.

Also within the Petition are numerous contentions relating to the TSPA. I hereby adopt as my own opinions the statements contained within Paragraph 6 of those specific contentions identified in Attachment C to this Affidavit.<sup>193</sup>

By paragraphs 5 and 6, the affiant had reference to the discussion in the Nevada contentions designated to meet, respectively, the expert opinion and genuine dispute requirements contained in section 2.309(f)(1)(v) and (vi). In Appendix B, he listed those contentions for which he was adopting as his own opinion the content of Nevada's paragraph 5 discussion. In Appendix C, he listed the contentions as to which he adopted as his own opinion the content of paragraph 6. NEV-SAFETY-009 is listed in both Appendices, and thus Dr. Thorne has adopted "as [his] own opinions" the content of both paragraph 5 and paragraph 6 of that contention.<sup>194</sup>

In responding to paragraph 5 in NEV-SAFETY-009, DOE presented this universal response to the incorporation in the Thorne affidavit (and those of other Nevada experts) of the content of the contention:

Nevada's petition does attach several affidavits (Jonathan Overpeck and Michael C. Thorne), which purportedly provide expert opinions to support this contention. However, rather than providing information to support the assertions in paragraph 5 of this contention, the affidavits simply "adopt" the otherwise unsupported assertions made in paragraph 5 of the contention. That approach falls short of the requirement to provide conclusions supported by reasoned bases or explanation.<sup>195</sup>

The Boards are aware of no support for DOE's position in either the Statement of

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<sup>193</sup> Nevada Petition, Exh. 3, Affidavit of Dr. Michael C. Thorne ¶¶ 2-3 (Dec. 19, 2008) [Thorne Aff.].

<sup>194</sup> Thorne Aff. ¶¶ 2-3.

<sup>195</sup> DOE Nevada Answer at 158.

Considerations underlying section 2.309(f)(1)<sup>196</sup> or decisions of the Commission interpreting and applying that section, and DOE provides none. Thus, the relevant question is whether the purposes served by the admissibility requirements imposed by that section are not satisfied by the affidavits that DOE attacks.

Adopting DOE's position would exalt form over substance. The objective of the section 2.309(f)(1)(v) and (vi) requirements is to ensure that Boards admit only those conditions that have been demonstrated to have sufficient substance to warrant further consideration on the merits. One method of demonstrating that a particular contention is worthy of admission is, of course, the furnishing of the reasoned opinion of a qualified expert.

In the case of Dr. Thorne's support of NEV-SAFETY-009, DOE's objection to the form of the affidavit would have evaporated if all of the discussion in paragraph 5 of the contention regarding the Forester and Solomon studies had been found in the affidavit itself. Why then should it be of any significance that, instead, Nevada elected to include that discussion in the body of the contention and then had Dr. Thorne subscribe to it in his affidavit? At bottom, what is important is that the claim made in NEV-SAFETY-009 has the support of the opinion of a clearly qualified expert. Although there might be other reasons for not admitting the contention, the form of Dr. Thorne's affidavit should not be one of them.

DOE's suggestion – that what has been provided is no more than the opinion of Nevada counsel who drafted the contentions – is both surprising and meritless. DOE's counsel are experienced litigators, who surely have had occasion to prepare many affidavits for the signature of the affiant and submission to an adjudicatory tribunal. They must be aware that the process of affidavit preparation almost inevitably involves the collaborative effort of counsel and affiant, and that what is submitted to the tribunal will represent the views of the affiant even though the drafting of the document might have been accomplished by the counsel. That being so, it is not important whether or not Nevada counsel drafted paragraph 5 in NEV-SAFETY-009

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<sup>196</sup> See 69 Fed. Reg. 2182.

and the other contentions receiving Dr. Thorne's endorsement. Absent any indication to the contrary, there is every reason to believe Nevada's express representation that the expert was involved in its formulation, if not its actual composition.<sup>197</sup> DOE has provided no reason to doubt the authenticity of Nevada's experts' statements.

DOE further contended, at oral argument, that Nevada's affidavits should be rejected because they violate the June 20, 2008 APAPO Board Order<sup>198</sup> directive that affidavits should "contain numbered paragraphs that can be cited with specificity."<sup>199</sup> DOE ignores the APAPO Board's purpose. The APAPO Board anticipated that numerous contentions might be supported by a given expert, and hoped to be able to identify the specific portions of supporting affidavits relevant to specific contentions. Instead, Nevada's experts adopted specific paragraphs of specific contentions as their own – thereby accomplishing the same objective by other means. In any event, directly contrary to DOE's position, the APAPO Board Order expressly stated that its requirements were "not intended to make the process more difficult."<sup>200</sup> On the contrary, the APAPO Board stated that, absent bad faith, "because the requirements are being imposed for the first time in a unique and complex proceeding, failure to comply . . . shall not be grounds . . . to object to the admissibility of a proffered contention."<sup>201</sup>

## 2. Supporting References

Both DOE and the NRC Staff insist that an expert's opinion should be accompanied by a specific reference to supporting sources and documents.<sup>202</sup> They contend that any contention lacking such documentation must not be admitted.

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<sup>197</sup> See Nevada DOE Reply at 61; see also 10 C.F.R. § 2.304(d).

<sup>198</sup> U.S. Dep't of Energy, LBP-08-10, 67 NRC 450.

<sup>199</sup> Tr. at 433-34.

<sup>200</sup> U.S. Dep't of Energy, LBP-08-10, 67 NRC at 452.

<sup>201</sup> Id.

<sup>202</sup> See, e.g., DOE Nevada Answer at 765-66; NRC Staff Answer at 503-504.

DOE and the NRC Staff claim that the requirement that expert opinion must invariably be accompanied by a reference to supporting sources and documents is based on section 2.309(f)(1)(v). That provision requires “references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position.” It says nothing about references upon which an expert might rely in offering expert opinion. And it surely cannot reasonably be interpreted to require a petitioner to produce, at this stage, its exhibit list for a hearing. On the contrary, “[a] petitioner does not have to provide a complete or final list of its experts or evidence or prove the merits of its contention at the admissibility stage.”<sup>203</sup>

Fairly read, section 2.309(f)(1)(v) offers the petitioner an opportunity to bolster the required “concise statement of . . . alleged facts or expert opinions” with “specific sources and documents on which the requestor/petitioner intends to rely.” If a petitioner so chooses, then it must give references to such sources and documents. As with a summary disposition motion, however, the support for a contention should be viewed in a light that is favorable to the petitioner.<sup>204</sup> The requirement for such support “generally is fulfilled when the sponsor of an otherwise acceptable contention provides a brief recitation of the factors underlying the contention or references to documents and texts that provide such reasons.”<sup>205</sup>

Insofar as the Boards can determine, section 2.309(f)(1)(v) has never been interpreted as imposing a requirement that an expert’s opinion must include specific references to supporting sources and documents. The Boards have not been directed to anything in the Statement of Considerations pertaining to the underlying purpose of section 2.309(f)(1) that lends credence to this position. Nor have the Boards been made aware of any Commission decision in which a contention was found unacceptable because the expert did not support his

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<sup>203</sup> Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 356 (2006).

<sup>204</sup> Id.

<sup>205</sup> 54 Fed. Reg. at 33,170 (emphasis added) (internal quotations omitted) (quoting Texas Utils. Elec. Co. (Comanche Peak Steam Elec. Station, Unit 1), ALAB-868, 25 NRC 912, 930 (1987)).

or her conclusions with identification of the sources or documents upon which that opinion rested.

The decisions cited by DOE stand simply for the unremarkable proposition that expert opinion must not be limited to bald conclusory statements such as that the application under consideration is “deficient,” “inadequate,” or “wrong.”<sup>206</sup> Not a word in any of those decisions might be taken as imposing a strict obligation upon an expert to buttress a tendered opinion with references to specific sources or documents.

The absence of any such imposed obligation in either the applicable Statement of Considerations or the decisions interpreting and applying section 2.309(f)(1)(v) is not surprising. The purpose of that subsection, when read in conjunction with the subsection (vi) requirement of the existence of a genuine dispute on an issue of material fact or law, is to ensure that there is possibly enough substance to the contention to warrant further exploration. As explained in the Statement of Considerations, the Commission’s objective was “to ensure that the adjudicatory process is used to address real, concrete, specific issues that are appropriate for litigation.”<sup>207</sup> It is to that end that an expert opinion is provided. Although that opinion must provide a sufficient foundation for the conclusions stated therein, it is fatuous to suggest that, in all instances, the expert must refer to specific sources or documents.

It is not invariably the case that an expert opinion will have at its foundation some independent source or document. In some instances the opinion tendered in support of a particular contention might appropriately be based upon conclusions formulated by the expert following his or her own study over the course of perhaps many years. Depending upon the nature of the study, there might or might not be the accumulation of data in furtherance of the

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<sup>206</sup> See USEC, Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006); Fansteel, CLI-03-13, 58 NRC at 203; Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2, Catawba Nuclear Station, Units 1 & 2), LBP-02-4, 55 NRC 49, 66 (2002); Private Fuel Storage, LBP-98-7, 47 NRC at 181.

<sup>207</sup> 69 Fed. Reg. at 2202.

furnished conclusions. In formulating its contention admissibility criteria, the Commission was presumably aware of these considerations.

Finally, a crucial flaw in DOE's position was exposed at oral argument. According to DOE's counsel, DOE was entitled to be supplied with the sources and documents undergirding an expert's expressed opinion because such access was necessary to enable DOE to try to persuade the Boards, presumably by furnishing counter sources and documents, that the expert's opinion was in error.<sup>208</sup> But such exploration of the substantiality of expert opinion is manifestly not appropriate at the contention admissibility stage. Instead, going as it does to the merits, it must await the filing of motions for summary disposition or the convening of an adjudicatory hearing.

Accordingly, in passing upon whether a particular contention meets the section 2.309(f)(1)(v)-(vi) admissibility test, the Boards have confined their inquiry to whether, with or without references to particular sources or documents, the supporting expert opinion has offered enough to justify a conclusion that the contention is worthy of further consideration on its merits. If the contention satisfies that test, it then moves on for that examination, either on motion for summary disposition or following an evidentiary hearing.

#### D. Allegedly Heightened Standard for Admitting HLW Contentions

Despite the established contention admissibility standards of 10 C.F.R. § 2.309(f)(1), DOE argues in its answers to all the intervention petitions, except that of Caliente, that petitioners have a heightened obligation to proffer focused and adequately supported contentions in this proceeding because of the existence of the LSN.<sup>209</sup> Citing selected portions of an internal agency document and the voluminous regulatory history of 10 C.F.R. Part 2,

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<sup>208</sup> Tr. at 443-44, 446.

<sup>209</sup> See, e.g., DOE Nevada Answer at 29-34; DOE NEI Answer at 29-32; DOE Nye Answer at 4-6; DOE Nevada 4 Counties Answer at 4-6; DOE California Answer at 29-32; DOE NCA Answer at 26-29; DOE TIM Answer at 34-36; DOE Clark Answer at 11-14; DOE Inyo Answer at 11-14; DOE White Pine Answer at 4-7; DOE TSO Answer at 27-30.

Subpart J, DOE asserts that the purpose of the LSN was to afford potential participants the opportunity to frame focused contentions.<sup>210</sup> DOE then sets out its view of the completeness, extensiveness, and usefulness of its LSN document collection and appears to argue that its enormous document productions, coupled with the purpose of the LSN to provide petitioners with the opportunity to frame focused contentions, raises the bar for contention admissibility in this proceeding.<sup>211</sup> All of the petitioners who addressed the issue, as well as the NRC Staff, disagree with DOE.<sup>212</sup>

Insofar as DOE continues to assert this argument,<sup>213</sup> its position is without merit. The standards embodied in section 2.309(f)(1) have been in existence, for the most part, since 1989.<sup>214</sup> If, in subsequently promulgating Subpart J containing the LSN provisions, the Commission had wanted to raise the standard for the admissibility of contentions because of the LSN, it could have done so explicitly, as it did in 10 C.F.R. § 51.109(a)(2) with respect to the admissibility of contentions raising NEPA issues. The Commission did just the opposite. In promulgating Subpart J, the Commission expressly provided that section 2.309 was to remain unchanged.<sup>215</sup>

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<sup>210</sup> See, e.g., DOE Nevada Answer at 29-30.

<sup>211</sup> See, e.g., id. at 29-34; Tr. at 651-54. For a countervailing view of the completeness, extensiveness, and usefulness of the DOE LSN collection, see, e.g., Nevada DOE Reply at 30-33, 36-39.

<sup>212</sup> See Nevada 4 Counties DOE Reply at 5-6; Tr. at 671; Nye Reply at 12 n.4; Tr. at 678; Clark Reply at 19-20; Tr. at 673-74; Nevada DOE Reply at 29-39; Tr. at 661-66. See also Tr. at 670 (NRC Staff), 672-73 (NCA), 674-75 (TIM), 675-76 (TSO).

<sup>213</sup> See Tr. at 656-57; but see Tr. at 679.

<sup>214</sup> See 54 Fed. Reg. 33,168.

<sup>215</sup> See 10 C.F.R. § 2.1000.

#### E. TSPA Model-Based Contentions

NRC regulations concerning the proposed repository are set forth in 10 C.F.R. Part 63. Among other things, the regulations impose limits on radiological exposures.<sup>216</sup> The regulations further provide that compliance with such limits, over necessarily long time periods, “requires a performance assessment.”<sup>217</sup> Under the Commission’s regulations, not any performance assessment will do, but only one that meets a number of very specific requirements.<sup>218</sup>

DOE endeavors to satisfy the Commission’s performance assessment requirements through a complex model designated the Total System Performance Assessment (TSPA).<sup>219</sup> Nevada and other petitioners proffer more than 100 contentions alleging various defects in the TSPA. The overwhelming majority of such contentions allege that these defects result in one or more violations of the Commission’s regulations and are supported by affidavits from competent experts.

DOE opposes the admission of all contentions concerning the TSPA. The NRC Staff opposes the vast majority of those contentions.<sup>220</sup> That such contentions allege violations of the Commission’s regulations for performance assessments, DOE argues, does not make them “material to this proceeding.”<sup>221</sup> Rather, DOE asserts, such contentions must also demonstrate how each alleged defect in the TSPA “either independently or cumulatively in combination with other contentions could result in an increase in the mean dose above regulatory limits.”<sup>222</sup>

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<sup>216</sup> Id. § 63.311.

<sup>217</sup> Id. § 63.102(j); see also 10 C.F.R. § 63.113.

<sup>218</sup> See, e.g., 10 C.F.R. § 63.114.

<sup>219</sup> Yucca Mountain Repository License Application Safety Analysis Report at 2.4-1 (2008).

<sup>220</sup> See, e.g., NRC Staff Answer at 1575-76 (The NRC Staff does not object to a contention that focuses on net infiltration modeling (NEV-SAFETY-40)).

<sup>221</sup> DOE Nevada Answer at 4.

<sup>222</sup> Id.

Nevada in particular, DOE contends, “has the ability to quantify the impacts of its contentions on dose and at a minimum to provide a qualitative analysis of how the contention would affect the model, including the likely range of impacts on dose.”<sup>223</sup>

DOE and the NRC Staff would have the Boards create barriers to the admissibility of contentions that do not exist under the Commission’s regulations. As reflected in the rulings of individual Boards, all admitted contentions that allege defects in the TSPA satisfy the requirements of 10 C.F.R § 2.309(f)(1). Arguments to the contrary are unpersuasive.

First, Part 63 requires more than a performance assessment that demonstrates compliance with dose standards. To be used for this purpose, a performance assessment must itself comply with specific and separately articulated requirements.<sup>224</sup> In promulgating Part 63, the Commission made clear that these involve a “range of considerations,” including “requirements for addressing uncertainty, providing technical basis for models, and additional requirements, beyond expected performance.”<sup>225</sup>

For example, Nevada’s TSPA contentions all allege separate and specific violations of Part 63, e.g., that the TSPA: (1) omits “the full range of defensible and reasonable parameter distributions”;<sup>226</sup> (2) is not based on “credible models and parameters”;<sup>227</sup> (3) omits “features, events and processes” (FEP) that should have been included;<sup>228</sup> (4) fails to “account for uncertainties and variabilities in parameter values”;<sup>229</sup> (5) fails to “provide for the technical basis

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<sup>223</sup> Id.

<sup>224</sup> See, e.g., 10 C.F.R. §§ 63.101, 63.102, 63.114, 63.305.

<sup>225</sup> Disposal of High-Level Radioactive Wastes in a Proposed Geologic Repository at Yucca Mountain, NV, 66 Fed. Reg. 55,732, 55,747 (Nov. 2, 2001) (emphasis added).

<sup>226</sup> See, e.g., Nevada Petition at 231 (citing 10 C.F.R. § 63.304).

<sup>227</sup> See, e.g., Nevada Petition at 374 (citing 10 C.F.R. § 63.102(h)).

<sup>228</sup> See, e.g., Nevada Petition at 542 (citing 10 C.F.R. § 63.114(e)).

<sup>229</sup> See, e.g., Nevada Petition at 625 (citing 10 C.F.R. § 63.114(b)).

for parameter ranges, probability distributions, or bounding values”,<sup>230</sup> and (6) fails to consider “alternative conceptual models of features and processes that are consistent with available data and current scientific understanding.”<sup>231</sup> Proffered contentions that adequately allege violations of such regulatory requirements raise material issues in and of themselves, because, as the Commission clarified in promulgating Part 63, “any determination that the postclosure performance objectives will be met will be based on a comprehensive set of regulatory requirements,” including requirements “beyond expected performance for increasing confidence”<sup>232</sup> in achieving this goal. These separate requirements in the Commission’s regulations cannot be ignored, as if the only requirement in Part 63 were to demonstrate compliance with dose standards by any method that the Applicant chooses.

Moreover, 10 C.F.R. § 63.114(c) specifies that any performance assessment used to demonstrate compliance with 10 C.F.R. § 63.113 must “[c]onsider alternative conceptual models.” Section 63.102(j) defines a “performance assessment” as a “systematic analysis” that “quantitatively estimate[s] radiological exposures.” Read together, the Commission’s regulations require that alternative conceptual models must be “considered” in the “systematic analysis” in the TSPA that “quantitatively estimate[s] radiological exposures.”

DOE cites NRC case law, purportedly for the proposition that petitioners must more fully explain the implications of the deficiencies they allege in the TSPA.<sup>233</sup> DOE’s citations are inapposite. No cited case stands for the proposition that well-supported allegations of violations of specific, relevant NRC regulations of the kind at issue here fail to raise a material issue.<sup>234</sup>

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<sup>230</sup> See, e.g., Nevada Petition at 625.

<sup>231</sup> See, e.g., id. at 824 (citing 10 C.F.R. § 63.114(c)).

<sup>232</sup> 66 Fed. Reg. at 55,747.

<sup>233</sup> See, e.g., DOE Nevada Answer at 53-57.

<sup>234</sup> See McGuire, CLI-03-17, 58 NRC 419 (intervenors did not perform the bare minimum preparations; there was no attempt to perform any independent analysis); Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 & 3), LBP-08-13, 67 NRC \_\_ (July 31, (continued))

DOE dismisses the requirements of Part 63 as “process regulations.”<sup>235</sup> Even assuming that alleged violations of Commission regulations might not raise a material issue in certain circumstances, these proceedings present no such case. When the Commission developed Part 63, it explained in response to comments that the repository’s post-closure safety would not depend solely upon meeting a dose standard. Instead, post-closure safety would depend upon a comprehensive set of requirements, including the ones on which Nevada relies.<sup>236</sup>

Second, some TSPA-related contentions do assert, explicitly or by implication, that alleged defects in the TSPA will increase the likelihood that dose standards might not be achieved. Clark, for example, contends that alleged errors “could mean that the risk is greater than reported in the TSPA” and that the “TSPA could underestimate the consequences and likelihood of post-closure radioactive releases.”<sup>237</sup> Separate and apart from alleged violations of other specific regulatory requirements that apply to the TSPA, such qualitative predictions – when adequately supported by reasoned affidavits from competent experts – are by themselves sufficient to admit contentions. During a discussion of TSPA-related contentions before the APAPO Board in May 2008, counsel for DOE appeared to agree:

JUDGE BOLLWERK: So what you’re saying is if they have an affidavit from an expert that says, “this is material”, that would suffice?

MR. SILVERMAN: With a sufficient – a reasonable explanation that . . . would be appropriate at this stage of the proceeding, yes.<sup>238</sup>

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2008) (contention was not well supported by the expert); Pilgrim, LBP-06-23, 64 NRC 257 (well supported contention was admitted); Dominion Nuclear Connecticut (Millstone Nuclear Power Station, Unit 2), LBP-03-12, 58 NRC 75 (2003) (petitioner offered only bald assertions and provided little support for them); Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), LBP-03-17, 58 NRC 221 (2003) (intervenors did not show that a model was defective or used incorrectly but simply that a different result would be achieved using their own model); Florida Power & Light Co. (Turkey Point Plant Unit Nos. 3 & 4), LBP-90-16, 31 NRC 509 (1990) (Petitioner made minimal effort to support its contentions).

<sup>235</sup> Tr. at 216.

<sup>236</sup> See generally 66 Fed. Reg. at 55,747.

<sup>237</sup> Clark Petition at 6, 22.

<sup>238</sup> APAPO Board Conference Transcript (May 14, 2008) at 96 [APAPO Tr.].

Third, to require petitioners to rerun the TSPA themselves, in order to demonstrate the individual or collective effects of the defects they allege, would improperly require the Boards to adjudicate the merits of contentions before admitting them.<sup>239</sup>

At hearings on the merits, DOE will have several choices. For example, DOE may try to disprove the alleged defects. Or DOE may endeavor to show that, individually and collectively, the alleged defects do not affect the TSPA even if assumed to be true. Or DOE may try to disprove some of the alleged defects and endeavor to show that, individually and collectively, any remaining alleged defects will not affect the TSPA.

But DOE cannot, at the contention admissibility stage, demand that petitioners rerun DOE's TSPA in order to demonstrate the impact of alleged defects. Again, in proceedings before the APAPO Board, counsel for DOE appeared to agree:

MR. SILVERMAN: I'm not suggesting they have to rerun the TSPA in its entirety, but they do have a burden as a petitioner to identify a genuine issue of material fact.<sup>240</sup>

DOE counsel also represented to the Board:

MR. SILVERMAN: If I understand [Nevada counsel] correctly, he is saying that the State would endeavor to identify as specifically as reasonable possible errors in models or sub models as individual contentions. We agree with that.

He is saying that they would not necessarily need to identify the implications of – the cumulative implications, perhaps, of all of those various errors. I believe he's saying that. And if that's true I think that's right.<sup>241</sup>

Finally, petitioners have at the very least raised a substantial fact question as to whether it would have been reasonably possible for them to rerun the TSPA before filing their contentions. Compared to notice pleading in the federal courts, the NRC's contention

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<sup>239</sup> See Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-17, 56 NRC 1, 9-10 (2002).

<sup>240</sup> APAPO Tr. at 95.

<sup>241</sup> APAPO Tr. at 89-90.

requirements have correctly been called “strict by design.”<sup>242</sup> They are not intended, however, to require the impossible.

Nevada’s experts have stated in affidavits that, to reflect the consequences of individual contentions, it would be necessary to perform a substantial number of additional modeling cases that are beyond the practical ability of anyone other than DOE to perform. Nevada’s experts have also stated, in affidavits, that to reflect the cumulative effects of relevant contentions would require analysis of many thousands of possible changes. As Nevada explains in relevant contentions that are supported by affidavits:

Because the TSPA is a complex non-linear model, and changes in the approach adopted are likely to result in changes in the results obtained that vary both as a function of time postclosure and from realization to realization within a modeling case, a determination whether acceptance of this contention would necessarily lead to calculated doses in excess of EPA’s dose standards would require DOE to perform a substantial number of additional modeling cases that are not included in the [Application] and that are beyond the practical ability of anyone else to perform. Moreover, there are more than 100 Nevada TSPA contentions with characteristics like this one. These relate to a total of 19 different broad aspects of the TSPA. Therefore, there are many thousands of possible changes that would need to be made to DOE’s TSPA approach to include the effects of accepting this one contention along with all possible combinations of Nevada’s other contentions relating to different aspects of the TSPA, even if all contentions relating to each broad aspect of the TSPA were considered together in defining the variant cases. This vastly increases the burden and complexity of showing the dose effects of acceptance of Nevada’s contentions.<sup>243</sup>

DOE suggests otherwise. DOE notes that Nevada’s own expert purports to be “qualified and experienced in performing risk assessments for nuclear waste disposal facilities,”<sup>244</sup> pointing out that Nevada has acquired relevant software, that DOE held a “tutorial” for Nevada on the TSPA, and that the TSPA can be scrutinized and run on Nevada’s computers.<sup>245</sup> DOE asserts that Nevada should not only be able to run the TSPA model, but even without doing so,

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<sup>242</sup> Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

<sup>243</sup> See, e.g., Nevada Petition at 95-96.

<sup>244</sup> DOE Nevada Answer at 50 (citing Thorne Aff. ¶ 1).

<sup>245</sup> DOE Nevada Answer at 50-51.

Nevada should be able to provide “at least a qualitative assessment, and in many cases a quantitative assessment, of the effect of its alleged errors and deficiencies on the repository’s ability to meet regulatory standards.”<sup>246</sup>

These suggestions by DOE merely illustrate that there exists a factual dispute that cannot be resolved against petitioners at the contention admissibility stage<sup>247</sup> – especially where petitioners’ version of the facts is supported by sworn affidavits and DOE’s version is not.

F. “Reasonable Assurance” and “Reasonable Expectation”

Under 10 C.F.R. § 63.31, the Commission may authorize construction of the proposed repository if, inter alia, DOE’s Application provides a “reasonable assurance” of preclosure safety and a “reasonable expectation” of postclosure safety.<sup>248</sup> According to DOE, “Nevada has made no effort to demonstrate and has not even asserted that DOE has failed to satisfy the reasonable expectation standard identified by 10 C.F.R. § 63.101 as the general standard for postclosure matters.”<sup>249</sup> Thus, DOE argues, Nevada has neglected to make the “materiality” showing required for contention admissibility.<sup>250</sup> The Boards are not persuaded.

Underlying DOE’s argument is the assumption that “reasonable expectation” connotes less exacting obligations than does “reasonable assurance” – the standard applicable to most

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<sup>246</sup> Id. at 52.

<sup>247</sup> See, e.g., McGuire/Catawba, CLI-02-17, 56 NRC at 9-10.

<sup>248</sup> Specifically, with regard to safety, the Commission must find:

- (1) That there is reasonable assurance that the types and amounts of radioactive materials described in the application can be received and possessed in a geologic repository operations area of the design proposed without unreasonable risk to the health and safety of the public; and
- (2) That there is reasonable expectation that the materials can be disposed of without unreasonable risk to the health and safety of the public.

10 C.F.R. § 63.31(a) (emphasis added).

<sup>249</sup> DOE Nevada Answer at 40.

<sup>250</sup> See 10 C.F.R. § 2.309(f)(1)(iv).

types of licensing cases that come before the NRC.<sup>251</sup> According to DOE, the reasonable expectation standard “requires a different level and type of technical proof”<sup>252</sup> than the reasonable assurance standard and encompasses use of “cautious but reasonable approaches consistent with present knowledge in lieu of bounding or more conservative approaches [sic].”<sup>253</sup> DOE further claims that the reasonable expectation standard takes into account inherent uncertainties in the post-closure model, and that “[t]o merely assert the existence of such uncertainties, without specifying their impact on a finding NRC must make in its issuance of the construction authorization, amounts to an improper challenge to Part 63, which explicitly recognizes that such uncertainties exist and cannot be eliminated.”<sup>254</sup>

In making this argument, DOE relies on statements of the EPA suggesting that “reasonable expectation” is a more flexible alternative to the standard NRC applies in reactor licensing cases.<sup>255</sup> DOE finds these EPA statements to be relevant because, under the NWPA and the Energy Policy Act of 1992 (EnPA), the Commission’s technical requirements and criteria must be “consistent” with the radiological protection standards promulgated by EPA.<sup>256</sup> Thus, DOE argues, “the proper application of the reasonable expectation standard must take into account the statements by EPA in promulgating the standards required by [EnPA].”<sup>257</sup> At

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<sup>251</sup> See, e.g., 10 C.F.R. §§ 50.35(c) (reactor construction permits), 50.57(a)(3) (reactor operating licenses), 52.24(a)(3) (early site permits), 52.54(a)(3) (standard design certifications), 52.97(a)(1)(iii) (combined licenses), 52.167(a)(2) (manufacturing licenses), 54.29(a) (renewed licenses).

<sup>252</sup> DOE Answer to Nevada at 41.

<sup>253</sup> Id. at 40.

<sup>254</sup> Id. at 39.

<sup>255</sup> Id. at 41-42.

<sup>256</sup> See NWPA § 121(b)(1)(C), 42 U.S.C. § 10141(b)(1)(C); EnPA § 801(b)(1), 42 U.S.C. § 10141 note.

<sup>257</sup> DOE Nevada Answer at 41 (citing 66 Fed. Reg. at 32,101-03; Proposed Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 70 Fed. Reg.

oral argument, however, DOE counsel appeared to retreat from this reliance on EPA's statements, conceding that "I don't think they have a great amount of weight or consideration in the discussion we have here."<sup>258</sup>

At oral argument, DOE likewise retreated from the position that "reasonable expectation" and "reasonable assurance" call for different levels of proof. Instead, DOE acknowledged that the same standard of proof applies to both preclosure and postclosure safety – namely, proof by a preponderance of the evidence – but insisted that "the methodology for the Commission to reach its finding of reasonable assurance and reasonable expectation is different."<sup>259</sup> In support of this position, DOE pointed to 10 C.F.R. § 63.304, which lists four characteristics of the reasonable expectation standard.<sup>260</sup> According to section 63.304, reasonable expectation:

- (1) Requires less than absolute proof because absolute proof is impossible to attain for disposal due to the uncertainty of projecting long-term performance;
- (2) Accounts for the inherently greater uncertainties in making long-term projections of the performance of the Yucca Mountain disposal system;
- (3) Does not exclude important parameters from assessments and analyses simply because they are difficult to precisely quantify to a high degree of confidence; and
- (4) Focuses performance assessments and analyses on the full range of defensible and reasonable parameter distributions rather than only upon extreme physical situations and parameter values.

In DOE's view, these characteristics indicate a significant departure from the methodology applied under the reasonable assurance standard.

In response, Nevada contended that most of these four characteristics could also be used to describe reasonable assurance.<sup>261</sup> According to Nevada, any difference in the degree

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49,014, 49,020-21 (Aug. 22, 2005); Final Rule, Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV, 73 Fed. Reg. 61,256, 61,271-73 (Oct. 15, 2008)).

<sup>258</sup> Tr. at 399.

<sup>259</sup> Tr. at 380 (emphasis added).

<sup>260</sup> Tr. at 363-64.

<sup>261</sup> Tr. at 387-89.

of acceptable uncertainty under the two standards is only “slight” and should not be granted any significance at the contention admissibility stage.<sup>262</sup>

The Boards agree with Nevada that DOE invokes a distinction without a difference. The NRC has repeatedly indicated that “reasonable expectation” and “reasonable assurance” mean virtually the same thing. In 2001, when it first decided to impose a “reasonable expectation” standard on post-closure safety rather than “reasonable assurance,”<sup>263</sup> the Commission justified this change as an attempt to “avoid any misunderstanding and to achieve consistency with final EPA standards,”<sup>264</sup> but not as an effort to lower the standard of proof that DOE must meet. In 2003, when Nevada challenged the “reasonable expectation” standard in federal court, arguing that the NWPA contemplates a higher “reasonable assurance” standard, the Commission replied that the two standards are “[v]irtually [i]ndistinguishable.”<sup>265</sup> In 2007, the NRC reaffirmed this position in a letter denying Nevada’s request for a binding interpretation of the phrase “reasonable expectation.”<sup>266</sup> And just recently, upon issuing the final rule implementing a dose standard after 10,000 years, the Commission once again confirmed that “the two terms are substantially identical.”<sup>267</sup>

The Commission has thus made clear its intention to treat “reasonable assurance” and “reasonable expectation” as equivalent standards. Moreover, the NRC is not bound by any contrary interpretation provided by EPA. The NWPA clearly delineates the differing roles of

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<sup>262</sup> Tr. at 389-90, 403-04.

<sup>263</sup> See 66 Fed. Reg. at 55,739-40 (revising the standard for postclosure safety, based on critical comments received from EPA and others).

<sup>264</sup> Id. at 55,740.

<sup>265</sup> Final Brief for the Federal Respondents, Nevada v. Nuclear Regulatory Comm’n, No. 02-1116 (June 6, 2003) at 47, available at <http://www.state.nv.us/nucwaste/legal/nrc/index.htm>.

<sup>266</sup> Letter from Karen D. Cyr, General Counsel for the NRC, to Martin G. Malsch, counsel for Nevada (May 18, 2007) (ADAMS Accession No. ML071920180).

<sup>267</sup> Final Rule, Implementation of a Dose Standard After 10,000 Years, 74 Fed. Reg. 10,811, 10,826 (Mar. 13, 2009).

EPA and the NRC in the HLW proceeding. The EPA is responsible for promulgating standards for environmental protection, and the NRC is tasked with promulgating the criteria it will apply in the licensing proceeding.<sup>268</sup> NRC's criteria must not be "inconsistent" with EPA's environmental protection standards.<sup>269</sup> But nothing in the language of NWPA or EnPA limits NRC's freedom to define the standard by which DOE must demonstrate safety, security, and environmental protection to the agency. Further, EPA itself has acknowledged that "NRC may establish requirements that are more stringent" than EPA's "minimum requirements for implementation of the disposal standards."<sup>270</sup> EPA recognizes that NRC has the authority to interpret "reasonable expectation" more strictly than EPA would prefer. Thus, DOE's reliance on EPA's statements is misplaced; NRC has the authority to interpret the phrase "reasonable expectation" as it sees fit. And the Commission has made clear that, for purposes of the HLW proceeding, "reasonable assurance" and "reasonable expectation" mean virtually the same thing.

Finally, even if the Boards were to treat "reasonable expectation" as a lower standard of proof – or as requiring a different methodology – DOE provides no practical guidance on how that standard should be implemented. Presumably, if DOE were right, Nevada would be required to demonstrate a greater level of uncertainty in DOE's Application in order to prevail on one of its contentions. But nowhere does DOE quantify the greater showing that Nevada must make. As Nevada noted at oral argument, neither the NRC nor DOE has articulated either the level of proof required or the amount of uncertainty allowed.<sup>271</sup> Thus, DOE would leave the Boards to implement an undefined standard of proof that falls somewhere between "reasonable

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<sup>268</sup> See NWPA § 121(a), (b)(1)(A), 42 U.S.C. § 10141(a), (b)(1)(A); EnPA § 801(a), 42 U.S.C. § 10141 note.

<sup>269</sup> See NWPA § 121(b)(1)(C), 42 U.S.C. § 10141(b)(1)(C); EnPA § 801(b)(1), 42 U.S.C. § 10141 note.

<sup>270</sup> Proposed Rule, Environmental Radiation Protection Standards for Yucca Mountain, NV, 64 Fed. Reg. 46,976, 46,997 (Aug. 27, 1999).

<sup>271</sup> Tr. at 388-90.

assurance” and no assurance at all. This is not a workable standard for admitting contentions. Ultimately, the Boards would be forced to apply it no differently than they apply “reasonable assurance” – on a case-by-case basis, using their own best judgment under the circumstances.<sup>272</sup>

#### G. Legal Issue Contentions

Under 10 C.F.R. § 2.309(f)(1)(i), a contention may raise an issue of law or fact. As the Commission’s rules formerly made clear, “[i]f . . . the presiding officer determines that any of the admitted contentions constitute pure issues of law, those contentions must be decided on the basis of briefs or oral argument according to a schedule determined by the . . . presiding officer.”<sup>273</sup> Although this explanation was dropped from the regulations in 2004, the reason was merely to simplify the rules, not to change them.<sup>274</sup>

Not all the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) necessarily apply to legal issue contentions. For example, a purely legal issue contention obviously need not allege “facts” under section 2.309(f)(1)(v). Likewise, the requirement that a NEPA contention be accompanied by one or more affidavits, pursuant to 10 C.F.R. § 51.109(a)(2), ought not apply to a legal issue contention under NEPA, as that section requires only affidavits

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<sup>272</sup> See, e.g., Amergen Energy Co., LLC (License Renewal for Oyster Creek Nuclear Generating Station), LBP-07-17, 66 NRC 327, 340 (Dec. 18, 2007) (stating that “whether the reasonable assurance standard is satisfied is based on sound technical judgment applied on a case-by-case basis”); CLI-09-07, 69 NRC \_\_, \_\_ (Apr. 1, 2009) (slip op. at 35) (declining to disturb LBP-07-17) (“‘Reasonable assurance’ . . . is based on sound technical judgment of the particulars of a case and on compliance with our regulations.”); Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-08-22, 68 NRC \_\_, \_\_ (Oct. 30, 2008) (slip op. at 57-58) (stating, in concurrence, that the reasonable assurance requires a licensing board to “tak[e] all relevant facts and circumstances into account”).

<sup>273</sup> 10 C.F.R. § 2.714(e) (2003). In 2004, the Commission codified the requirements of former section 2.714, together with rules regarding contentions set forth in Commission cases, in section 2.309. See 69 Fed. Reg. 2182.

<sup>274</sup> See 69 Fed. Reg. at 2182 (Commission amending regulations to make them more “effective and efficient”).

“which set forth factual and/or technical bases for the claim.” There is no requirement that legal arguments be presented by affidavit.

The Boards have admitted as legal issue contentions: (1) certain contentions so identified by petitioners; (2) certain contentions not so identified by petitioners but identified as such by the Boards; and (3) certain contentions that contain factual allegations but that also are in part appropriate for resolution as a legal issue. Additionally, it should be recognized that some factual contentions have been admitted at this time contingent upon the outcome of a related legal issue contention.

Briefing schedules for legal issue contentions will be set forth in a subsequent order. The Boards contemplate that, after such legal issue contentions are resolved, many remaining related factual contentions may be appropriate for summary disposition.<sup>275</sup>

#### IV. RULINGS ON STANDING

The standing of most petitioners is not disputed. Nevada has standing as of right as the host state for the GROA pursuant to 10 C.F.R. §§ 2.309(d)(2)(iii) and 63.63(a) and Part III, Paragraph A of the Notice of Hearing.<sup>276</sup> Nye has standing as the host county of the proposed Yucca Mountain repository pursuant to 10 C.F.R. § 2.309(d)(2)(iii). Pursuant to the Notice of Hearing, Nevada 4 Counties, Clark, Inyo, and White Pine need not address the standing requirements of 10 C.F.R. § 2.309(d) because they are AULGs as defined in section 2 of the NWPA,<sup>277</sup> and have been designated as such by the Secretary of Energy.<sup>278</sup> The standing of other petitioners is discussed below.

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<sup>275</sup> See 10 C.F.R. § 2.1025(a).

<sup>276</sup> See 73 Fed. Reg. at 63,031.

<sup>277</sup> NWPA § 2(31), 42 U.S.C. § 10101(31).

<sup>278</sup> 73 Fed. Reg. at 63,031.

A. Caliente (CAB-01)

Contrary to 10 C.F.R. § 2.1013(c) and the directive in the Notice of Hearing requiring that all pleadings be filed via the agency's Electronic Information Exchange (EIE),<sup>279</sup> Caliente's initial intervention petition, signed by its attorney, was not filed electronically and contains a single contention and nothing more.<sup>280</sup> That filing did not even address, much less establish, Caliente's standing. Thus, Caliente did not demonstrate that it met the requirements for standing, a necessary requisite for party status in the proceeding. Nor did Caliente's petition contain a request, under 10 C.F.R. § 2.309(e), for discretionary intervention or address the six factors that must be balanced in considering such a request.

Subsequent to its initial filing, Caliente filed electronically the identical intervention petition out of time.<sup>281</sup> Thereafter, in its reply to the answers of DOE and the NRC Staff, Caliente attempted to remedy the numerous procedural and substantive defects in its nontimely petition, pleading counsel's ignorance of the Commission's electronic filing rules and inexperience regarding NRC practice.<sup>282</sup> That attempt, including its efforts to address the factors for nontimely filings in 10 C.F.R. § 2.309(c) and to establish its standing, came too late. A petitioner's reply must narrowly focus upon the legal and factual arguments first presented in its petition and cannot be used as a vehicle to remedy a very deficient petition to which opposing parties have no opportunity to respond.<sup>283</sup> Accordingly, Caliente has failed to

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<sup>279</sup> Id. at 63,030.

<sup>280</sup> Caliente Petition.

<sup>281</sup> See id. (filed electronically on January 5, 2009).

<sup>282</sup> See Caliente Reply.

<sup>283</sup> See Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-08-19, 68 NRC \_\_\_, \_\_\_ (slip op. at 10 n.30) (Aug. 22, 2008) (citing Nuclear Mgmt. Co., LLC (Palisades Nuclear Plant), CLI-06-17, 63 NRC 727, 732 (2006) (“[a]llowing new claims in a reply . . . would unfairly deprive other participants of an opportunity to rebut the new claims”)); Louisiana Energy Servs., L.P. (Nat'l Enrichment Facility), CLI-04-25, 60 NRC 223, 225, reconsideration denied, CLI-04-35, 60 NRC 619 (2004).

demonstrate its standing and CAB-01 need not address such issues as Caliente's failure to file its initial petition via the EIE or its failure to file an affidavit in support of its proffered NEPA contention.

B. California (CAB-02)

Under the Commission's regulations, because the HLW repository is not to be located within California's boundaries, California is not entitled to automatic standing in this proceeding.<sup>284</sup> Rather, it must show that it meets the requirements for standing set forth in 10 C.F.R. § 2.309(d). California asserts two primary injuries as the basis for its standing to intervene: the threat posed by transportation of radioactive waste through California, and the threat posed by the migration of radioactive material from Yucca Mountain into California's groundwater.<sup>285</sup> California also seeks discretionary intervention under 10 C.F.R. § 2.309(e).<sup>286</sup>

In its answer, NRC Staff concedes that California has established standing based on the injury it alleges due to groundwater contamination.<sup>287</sup> It does not address California's other asserted bases for standing. For its part, DOE objects to California's standing with regard to both of its asserted injuries. Regarding the transportation of radioactive waste, it insists that California's injury is too "speculative," given that transportation routes through California have not yet been identified.<sup>288</sup> DOE also asserts that, because the selection of transportation routes occurs outside of the NRC licensing process, California's alleged injury cannot be redressed in the instant proceeding.<sup>289</sup> With regard to groundwater contamination, DOE maintains that California makes no showing of whether any such contamination will occur, when it will occur,

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<sup>284</sup> See 10 C.F.R. § 2.309(d)(2)(iii).

<sup>285</sup> California Petition at 9.

<sup>286</sup> Id. at 15-18.

<sup>287</sup> NRC Staff Answer at 29.

<sup>288</sup> DOE California Answer at 24.

<sup>289</sup> Id. at 23.

and what adverse effects it would have.<sup>290</sup> Additionally, DOE opposes California's discretionary intervention.<sup>291</sup>

The Board finds that California has established standing to intervene as a matter of right. It is undisputed that, if the NRC decides to grant DOE's Application, HLW will be transported through the State of California. This flows directly from the construction and operation of a repository at Yucca Mountain. This is not a "speculative" injury, as DOE insists, but an injury that is real and concrete. The fact that DOE has yet to identify specific transportation routes through California in no way diminishes this threat.<sup>292</sup> Finally, as California points out in its reply, the NRC does have the authority to redress this injury – namely, by ensuring that transportation impacts are addressed pursuant to NEPA. California is not asking the NRC to make routing decisions – decisions which fall under DOE's regulatory control. Rather, California is asking for an analysis of transportation impacts in DOE's EISs, a request that falls squarely within the scope of this proceeding. As discussed in Section III.B supra, where the Boards reject the argument that NEPA contentions related to transportation cannot be adjudicated in this proceeding, NEPA obligates the NRC to analyze and to disclose all the environmental effects – not just those arising from the portions of the repository over which the NRC has direct regulatory control.

Thus, we find that California has met the requirements for standing as a matter of right, based on the threats related to the transportation of radioactive waste. Because we have determined that California is entitled to standing as of right, we need not reach California's request for discretionary intervention.

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<sup>290</sup> Id. at 24-25.

<sup>291</sup> Id. at 25-28.

<sup>292</sup> See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 415 (2001) (finding that petitioner organizations had established standing based on their members' proximity to transportation routes, even where it was "not possible to predict with accuracy which of its members [were] most likely to be harmed or the extent of the damage"), rev'd on other grounds, CLI-02-24, 56 NRC 335 (2002).

C. NCA (CAB-02)

NCA describes itself as “a Nevada non-profit corporation composed of a Board of Directors from Native American communities downwind from the Nevada Test Site that experience adverse health consequences known to be plausible from exposure to radiation.”<sup>293</sup> NCA contends that disposal of HLW at Yucca Mountain, combined with the history of weapons’ testing at the Nevada Test Site, will result in radiological injuries to NCA’s members.<sup>294</sup> NCA also believes that “[f]ailure to protect Mother Earth from radioactive material” is to violate NCA’s “free exercise of religion” under the First Amendment.<sup>295</sup> NCA’s asserted interest in the proceeding is its “longstanding interest in protecting the high quality of life, health and safety of this and future generations of Newe and Nuwuvi [the Native American people] from radiation health effects that injure them individually and collectively.”<sup>296</sup> As an alternative to standing as a matter of right, NCA also seeks discretionary intervention under 10 C.F.R. § 2.309(e).<sup>297</sup>

In its answer, DOE argues that, as a non-profit corporation, NCA has established neither representational nor organizational standing. As to organizational standing, DOE states that NCA “never identifies its members, nor does it describe who exactly it purports to be representing” and that NCA’s asserted interest in the proceeding is not sufficiently concrete and particular to establish a basis for standing.<sup>298</sup> As to representational standing, DOE argues that NCA has failed to identify an individual member of the organization, to demonstrate that the member has standing in his or her own right, and to show that the member has authorized NCA

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<sup>293</sup> NCA Petition at 3.

<sup>294</sup> Id. at 5.

<sup>295</sup> Id.

<sup>296</sup> Id.

<sup>297</sup> Id. at 4.

<sup>298</sup> DOE NCA Answer at 20-22.

to intervene on his or her behalf.<sup>299</sup> Finally, DOE argues that NCA's petition does not meet or even address the six factors required for a grant of discretionary intervention.<sup>300</sup>

The NRC Staff, largely mirroring the arguments that DOE makes, also asserts that NCA has failed to establish both representational and organizational standing.<sup>301</sup>

NCA's reply elaborates on its case for representational standing. Generally, a petitioner's reply cannot be used to remedy a deficient petition, because opposing parties have no opportunity to respond.<sup>302</sup> NCA asks the Board to apply a standard of "fundamental fairness," however, because NCA filed its initial petition without the assistance of counsel.<sup>303</sup> At oral argument, both the NRC Staff and DOE acknowledged that, due to NCA's prior lack of counsel, it would not be inappropriate for the Board to consider the declarations submitted with NCA's reply.<sup>304</sup> Accordingly, we will take those declarations into account in making our standing determination. The declarations are from three NCA members, identified by name and address, who live either in the vicinity of Yucca Mountain or adjacent to transportation routes projected to carry HLW to and from the repository.<sup>305</sup> Their declarations allege in detail the radiological and cultural injuries these individuals would suffer as a result of the NRC's decision to grant DOE's

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<sup>299</sup> Id. at 22-23.

<sup>300</sup> Id. at 23-25.

<sup>301</sup> NRC Staff Answer at 19-22.

<sup>302</sup> Palisades, CLI-06-17, 63 NRC at 732; Louisiana Energy Servs., CLI-04-25, 60 NRC at 225.

<sup>303</sup> NCA Reply at 10-11; see also Crow Butte Res., Inc. (License Amendment for the North Trend Expansion Project), LBP-08-06, 67 NRC 241, 278 (2008); Shaw Areva MOX Servs. (Mixed Oxide Fuel Fabrication Facility), LBP-07-14, 66 NRC 169, 188 (2007).

<sup>304</sup> Tr. at 558-59.

<sup>305</sup> NCA Reply, Exh. 3, Declaration of Ian Zabarte (Mar. 9, 2009), Exh. 6, Declaration of Pauline Esteves (Mar. 6, 2009), Exh. 7, Declaration of Calvin Meyers (Mar. 6, 2009).

Application. Thus, we find that NCA has met the requirements for representational standing, and we grant NCA standing to intervene pursuant to 10 C.F.R. § 2.309(d).<sup>306</sup>

D. JTS (CAB-02)

Pursuant to 10 C.F.R. § 63.2, the Secretary of the Interior has found that the Timbisha Shoshone Tribe (Tribe) is an AIT for purposes of the NWPA.<sup>307</sup> Thus, the Tribe is automatically entitled to participate in the Yucca Mountain proceeding pursuant to 10 C.F.R. § 2.309(d)(2)(iii). Initially, however, two separate tribal entities filed petitions to intervene, each purporting to be the Tribe's sole authorized representative. Those two entities, TSO and TIM, represented two factions that are embroiled in an ongoing disagreement over tribal leadership that is currently pending within the Bureau of Indian Affairs (BIA) and in federal district court.<sup>308</sup> While those disputes remain unresolved, both entities initially sought to intervene as separate parties in this proceeding.

In its amended petition to intervene, TSO argued that the Boards should grant TSO standing to intervene on the basis of its status as an AIT.<sup>309</sup> Alternatively, TSO asserted arguments for representational standing and discretionary intervention. For its part, TIM asserted standing on the sole basis of its status as an AIT, entitled to automatic standing.<sup>310</sup>

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<sup>306</sup> For other standing requirements, see Section II.A supra. Causation and redressability have not been challenged and appear to be satisfied with respect to NCA.

<sup>307</sup> Letter from Department of the Interior, Assistant Secretary–Indian Affairs Carl J. Artman to Chairman Joe Kennedy of Timbisha Shoshone Tribe (June 29, 2007) at 4.

<sup>308</sup> According to counsel for TIM and counsel for TSO, there are two or three administrative appeals pending in the BIA, and the Assistant Secretary for Indian Affairs will not make a final determination as to the recognized tribal council for roughly five months. Tr. at 498-502. Moreover, any such BIA determination is subject to judicial review under the Administrative Procedure Act. Tr. at 502. To complicate matters further, TIM argues that “some of these issues [regarding tribal leadership] are not issues for the BIA to determine. They are issues that are to be resolved by a sovereign tribe.” Tr. at 503.

<sup>309</sup> TSO Amended Petition at 8-11. Because we grant TSO's motion for leave to file an amended petition, see Section X.B infra, we now consider the arguments for standing raised in TSO's amended petition.

<sup>310</sup> TIM Petition at 2-4.

That is, TIM claimed to be the duly authorized representative of the Tribe, without any regard for TSO's statements to the contrary.<sup>311</sup> Alternatively, TIM argued that the Board should permit it to intervene on a discretionary basis under 10 C.F.R. § 2.309(e).<sup>312</sup>

In their answers, both DOE and the NRC Staff conceded that the Tribe is an AIT and thus entitled to a presumption of standing under 10 C.F.R. § 2.309(d)(2)(iii).<sup>313</sup> Nevertheless, because these two separate entities filed petitions purporting to be the sole representative of the Tribe, both DOE and the NRC Staff maintained that only one should be granted standing as an AIT. According to DOE, the entity found not to be the Tribe's official representative should be denied participation in this proceeding for lack of standing.<sup>314</sup> The NRC Staff, on the other hand, did not take such a hard line. Rather, the NRC Staff conceded that, in the event TSO were found not to be entitled to represent the Tribe, TSO still met the requirements for representational standing.<sup>315</sup> Because TIM's petition did not specifically address representational standing, however, the NRC Staff insisted that TIM "should be required to specifically establish its authorization to represent the Tribe or address whether it, as a non-governmental entity, meets the NRC's standing requirements."<sup>316</sup>

At oral argument, the Board expressed concern about the competing bids for standing as representatives of the same AIT. The Board found that it was "in no position to resolve the dispute between TIM and TSO in terms of which group is the sole legitimate representative of

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<sup>311</sup> Id.

<sup>312</sup> Id. at 14-18.

<sup>313</sup> DOE Answer to TSO Amended Petition at 23; NRC Staff Answer to TSO Amended Petition at 7; DOE TIM Answer at 7; NRC Staff Answer at 29-30.

<sup>314</sup> DOE TIM Answer at 7.

<sup>315</sup> NRC Staff Answer to TSO Amended Petition at 9-10.

<sup>316</sup> NRC Staff Answer at 32.

the [Tribe].”<sup>317</sup> At the same time, however, the Board noted that Commission regulations might prevent it from admitting both parties as tribal representatives.<sup>318</sup> Indeed, section 2.309(d)(2)(ii) instructs a Board to grant party status only to “a single representative” for each AIT.<sup>319</sup> Thus, faced with the possibility that neither petitioner would attain party status, TIM and TSO agreed to confer regarding joint representation of the Tribe.<sup>320</sup>

On April 20, 2009, TIM and TSO filed a Joint Statement,<sup>321</sup> accompanied by a Letter of Understanding, setting forth their agreement to work together as a single participant in this proceeding until such time as the dispute between them is resolved. The Boards then issued an order recognizing the new entity, JTS, as a petitioner to intervene.<sup>322</sup> At this time, we find that JTS has established standing based on its status as the single designated representative of an AIT, pursuant to 10 C.F.R. § 2.309(d)(2)(iii). Henceforth, all of the contentions proffered by TIM and TSO will be treated as the contentions of JTS.

There remains one final matter to resolve. Prior to the formation of JTS, TSO moved for leave to file an answer to TIM’s reply, along with a proffered answer.<sup>323</sup> That answer related solely to the internal leadership dispute between TIM and TSO. Given that we now grant standing to JTS, the Board has no reason to consider the details of that dispute. Accordingly, we deny as moot TSO’s motion for leave to file an answer to TIM’s reply.

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<sup>317</sup> Tr. at 497.

<sup>318</sup> Tr. at 529-30.

<sup>319</sup> 10 C.F.R. § 2.309(d)(2)(ii) (emphasis added).

<sup>320</sup> Tr. at 532-34.

<sup>321</sup> Joint Statement of Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation (“TOP”) and Timbisha Shoshone Tribe (“TIM”) Regarding Participation as a Single Entity (Apr. 20, 2009).

<sup>322</sup> CAB Order (Accepting Joint Representation of Timbisha Shoshone Tribe) (Apr. 22, 2009) (unpublished).

<sup>323</sup> Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation’s Motion for Leave to File an Answer to the Timbisha Shoshone Tribe’s Reply to NRC Staff and DOE Answers to Its Motion to Intervene as a Full Party (Mar. 17, 2009).

E. NEI (CAB-03)

NEI is “the policy organization responsible for representing the nuclear industry before the executive, judicial and legislative branches of government on regulatory, technical and legal issues that generally affect its members.”<sup>324</sup> NEI does not seek organizational standing, but rather representational standing on behalf of its members.<sup>325</sup> For the reasons set forth below, we find that NEI has standing as of right. In the alternative, we find that NEI qualifies for discretionary intervention.

1. Standing as of Right

NEI asserts that affidavits submitted by its members that own nuclear power plants establish the grounds on which they merit standing: “their role and obligations as set forth in the NWPA,” as well as “their direct safety, security, environmental, operational, and financial interests in the timely licensing of the Yucca Mountain waste repository.”<sup>326</sup> NEI argues that those interests can be affected: (1) “by the continuing unavailability of a repository”; (2) “by the need for additional and ongoing [spent fuel] onsite storage [at power plants]”; and (3) “by the proposed design of the repository.”<sup>327</sup> NEI also emphasizes the multi-billion dollar contribution its members have been required to make to the Nuclear Waste Fund, which was established under the NWPA.<sup>328</sup>

NEI asserts that all those interests are within the “zone of interests” of the AEA, NEPA, and the NWPA.<sup>329</sup> NEI points out that it has – without challenge – participated elsewhere in related Yucca Mountain matters: in the “pre-application” phase of this very agency adjudication;

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<sup>324</sup> NEI Petition at 1-2.

<sup>325</sup> Id. at 1; see also Section II.A supra.

<sup>326</sup> NEI Petition at 3.

<sup>327</sup> Id.

<sup>328</sup> Id. at 3-4, 8.

<sup>329</sup> Id. at 1.

in numerous federal agency rulemakings; and in the federal court litigation (NEI v. EPA) discussed supra, where the D.C. Circuit determined that NEI had standing as an intervenor to challenge a federal regulation affecting repository design.<sup>330</sup>

Additionally, NEI bases its representational standing on radiological impacts to workers both at: (1) the repository, due to their increased exposure attributable to the alleged overdesign; and (2) reactor sites, due to the need for extended nuclear waste storage onsite if the licensing of the repository is delayed.<sup>331</sup> NEI's original petition asserts that its membership includes "unions,"<sup>332</sup> although its supporting affidavits then came only from companies operating nuclear power plants and from NEI's Director of the Yucca Mountain Project. These affidavits set forth the interests of NEI and its members, including unions.

DOE argues that NEI's grounds for standing as of right are inadequate. Specifically, DOE asserts: (1) the economic interest of NEI's members is not within the zone of interests protected by the statutes specifically at issue here, i.e., the AEA, the NWPA, and NEPA,<sup>333</sup> (2) risks to repository workers do not affect NEI's members;<sup>334</sup> and (3) risks to workers at commercial nuclear sites are outside the scope of this proceeding, which DOE says is limited to impacts at the GROA.<sup>335</sup>

Finally, DOE contends that NEI's past participation in both the pre-application stage of this proceeding and before the D.C. Circuit does not necessarily mean that NEI has standing here. It points out that there was no standing requirement for the PAPO proceedings.<sup>336</sup> DOE

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<sup>330</sup> Id. at 5-6.

<sup>331</sup> Id. at 5 & n.5.

<sup>332</sup> Id. at 2; Tr. at 91-92.

<sup>333</sup> DOE NEI Answer at 17.

<sup>334</sup> Id. at 21-22.

<sup>335</sup> Id. at 22-23.

<sup>336</sup> Tr. at 95.

also differentiates the facts of the NEI v. EPA case from those before this Board and argues that that case did not hold that NEI has standing generally under the NWPA or because some of its members would be harmed if the repository is delayed.<sup>337</sup> Instead, DOE argues, injury-in-fact standing “was based on a specific record and a likely connection between the challenged regulation and harm to NEI’s members.”<sup>338</sup>

The NRC Staff’s arguments are similar to DOE’s. The NRC Staff adds, regarding NEI’s claim that its members will suffer “occupational risk and radiological exposures” due to interim storage and disposal, that NEI does not suggest that it represents the workers at their members’ power reactor sites (or at the repository site for that matter) or show that these workers have authorized NEI to act on their behalf.<sup>339</sup>

The key issues to be resolved are: (1) what are the “zones of interests” protected by the statutes at issue in this proceeding; and (2) whether the economic harm discussed in NEI’s petition is itself sufficient, or is sufficiently related to environmental or radiological harm, to allow standing under the AEA or NEPA.<sup>340</sup> DOE argues that, in seeking standing based on the NWPA’s purpose of facilitating disposal of its members’ nuclear waste, NEI is impermissibly trying to “predicate standing on the overall purpose behind a statutory scheme, rather than a specific statutory provision.”<sup>341</sup> NEI asserts, in response, that this reading “fundamentally . . . ignores the zone of interests created by the NWPA.”<sup>342</sup> The Board agrees with NEI.

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<sup>337</sup> DOE NEI Answer at 20.

<sup>338</sup> Id.

<sup>339</sup> NRC Staff Answer at 26.

<sup>340</sup> For other standing requirements, see Section II.A supra. The Board focuses on the first requirement – that the petitioner has suffered a distinct harm that constitutes injury-in-fact within the zone of interests – because it is the only prong of the standing as of right test that the NRC Staff and DOE challenge in their answers. NEI does address the other two requirements – causation and redressability – in its petition. NEI Petition at 3.

<sup>341</sup> DOE NEI Answer at 21.

<sup>342</sup> NEI Reply at 7.

To be sure, economic interests are sometimes insufficient to establish standing. In the context of AEA licensing cases, the Commission frequently denies standing, for example, to competitors of an applicant or licensee who assert that their businesses would be injured if the pending request were granted.<sup>343</sup> The Commission has insisted, in most instances, that economic interests must be linked to potential radiological or environmental risks.<sup>344</sup>

The situation here is different. First, NEI seeks intervention to support DOE's Application based on its members' economic interest in the availability of the repository. Rather than constituting a competitor or merely a "concerned bystander,"<sup>345</sup> NEI represents those who are not only within the zone of interests of the NWPA but also are the intended beneficiaries of that Act.

Indeed, they can claim to be the real parties in interest in the success of DOE's Application, and have been supplying its financing through the targeted financial levy on their generation of power. Recognizing an economic standing interest in these circumstances is also consistent with the Commission's River Bend decision, which acknowledged the analogous standing of the part-owner of a facility.<sup>346</sup> And NEI's taking of a position in favor of the repository is not disqualifying, for there is precedent for the principle that intervention is allowable to those who wish to support a proposal that will affect their interests if the proceeding "has one outcome rather than another."<sup>347</sup>

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<sup>343</sup> See, e.g., Int'l Uranium (USA) Corp. (Request for Materials License Amendment), CLI-00-04, 51 NRC 88, 88-89 (2000).

<sup>344</sup> See, e.g., Pacific Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-02-16, 55 NRC 317, 336-38 (2002).

<sup>345</sup> DOE NEI Answer at 5 (internal citations omitted).

<sup>346</sup> Gulf States Utils. Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 48-50 (1994).

<sup>347</sup> See, e.g., Nuclear Eng'g Co. (Sheffield, Illinois, Low-Level Radioactive Waste Disposal Site), ALAB-473, 7 NRC 737, 743 (1978), cited with approval in Sequoyah Fuels Corp. (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 69 (1994).

NEI v. EPA is instructive as well. The D.C. Circuit granted NEI standing for several reasons. With respect to injury-in-fact, the court found “delaying the opening of the Yucca Mountain repository would inflict concrete harm on NEI members [who] expend substantial sums to operate their own storage facilities.”<sup>348</sup> Additionally, NEI’s use of litigation to speed the licensing of the Yucca Mountain repository was found to be germane to NEI’s purpose and did not require the actual participation of any of its members individually.<sup>349</sup>

The court found that the test to demonstrate prudential standing is “not meant to be especially demanding.”<sup>350</sup> Under that test – by which a party must show that its members’ concerns “arguably fall within the zone of interests protected or regulated by the statutory provision . . . invoked in the suit” – a party’s attempt to establish standing will fail “only if [the petitioner’s] interests are so marginally related to or inconsistent with the purposes implicit in the statute that it cannot reasonably be assumed that Congress intended to permit the suit.”<sup>351</sup> In NEI v. EPA, the court stated that, while Congress did intend for section 801(a) of the EnPA to protect the public, it is “equally obvious that Congress intended section 801(a) to facilitate construction of a permanent nuclear waste repository – the very interest that NEI advances here.”<sup>352</sup> Furthermore, “[a]s evinced in the NWPA and later in EnPA, Congress viewed EPA standards as a basic prerequisite for developing an underground repository.”<sup>353</sup> This “congressional purpose,” according to the court, showed that “NEI’s interests ‘arguably’ fall within section 801(a)’s zone of interests, thus giving the organization prudential standing.”<sup>354</sup>

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<sup>348</sup> 373 F.3d at 1279 (internal citations omitted).

<sup>349</sup> Id. (internal citations omitted).

<sup>350</sup> Id. (internal citations omitted).

<sup>351</sup> Id. at 1279-80 (internal citations omitted).

<sup>352</sup> Id. at 1280.

<sup>353</sup> Id.

<sup>354</sup> Id.

We find unpersuasive the argument that the Postal Workers case<sup>355</sup> suggests that NEI's members' economic interests are not within the zone of interests protected by the statutes that NEI invokes. Unlike NEI, the Postal Workers litigant tried to rely on very narrow statutory provisions to challenge the much broader aspects of a statute that had no meaningful relationship to the litigant's situation.

Likewise, while DOE is correct that the Commission noted in a 1989 rulemaking that the industry's interest in HLW is economic and "may not satisfy the Commission's traditional, judicial test for standing,"<sup>356</sup> we do not agree that a passing observation by the Commission in a twenty-year-old rulemaking – one that only states that economic interests "may" not support standing – is controlling. This is especially so because more recent precedent supports NEI's standing in this proceeding.<sup>357</sup>

We thus conclude that the economic interests of its nuclear utility members in the Application confer standing upon NEI. But in any event, NEI has shown how the economic interests at stake are indeed linked to potential radiological or environmental risks. The allegedly oversized elements of the project, NEI contends, will "create occupational risks and exposures for workers at operating reactors and fuel storage installations, as well as workers at the Yucca Mountain site."<sup>358</sup> In addition, there will be "[e]nvironmental impacts associated with the delay in decommissioning of sites . . . due to the continuing presence of

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<sup>355</sup> Air Courier Conf. v. American Postal Workers Union, 498 U.S. 517 (1991).

<sup>356</sup> Final Rulemaking, Submission and Management of Records and Documents Related to the Licensing of a Geologic Repository for the Disposal of High-Level Radioactive Waste, 54 Fed. Reg. 14,925, 14,931 (Apr. 14, 1989).

<sup>357</sup> See, e.g., Pacific Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), CLI-03-2, 57 NRC 19, 26-27 (2003); Ohio Edison Co. (Perry Nuclear Power Plant, Unit 1), LBP-91-38, 34 NRC 229, 244-45 (1991).

<sup>358</sup> NEI Petition, Attach. 1, Affidavit of Rodney McCullum in Support of the Standing of the Nuclear Energy Institute ¶ 8 (Dec. 2008).

used nuclear fuel.”<sup>359</sup> Other NEI members assert that an increase in duration of onsite storage will incur “operational and financial impacts, occupational radiation exposures, and security requirements.”<sup>360</sup>

Beyond the affidavit submitted by NEI that its membership includes unions, it is clear that the utilities that are NEI members have a cognizable interest in the health and safety of their workplaces (whether or not individual workers formally authorize their employer or NEI to represent their interests). It is in the self-interest of NEI utility company members to protect their employees, to keep them on the job, and to avoid potential liabilities that could be caused by the radiological and environmental harms associated with extended onsite storage.

Furthermore, agency precedent supports the assertion that there are certain organizations for which such “authorization might be presumed.”<sup>361</sup> While this line of cases originated with a citizens group – Union of Concerned Scientists (UCS) – the similarities to NEI are instructive. Essentially, these cases hold that for certain organizations whose “organizational objectives . . . in regard to nuclear power are clearly defined and well advertised[,] there can be little doubt that it is a desire to support the pursuit of those goals that motivates the . . . participation” of their members.<sup>362</sup> The cases go on to state that “[i]n such a situation, it might be reasonably inferred that by joining the organization, the members were implicitly authorizing it to represent any personal interests which might be affected by the proceeding.”<sup>363</sup> Based on NEI’s clearly-defined and well-known positions on nuclear energy and

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<sup>359</sup> NEI Reply at 3.

<sup>360</sup> NEI Petition, Attach. 2, Affidavit of J.A. Stall Authorizing Representation by the Nuclear Energy Institute ¶ 9 (Dec. 9, 2008).

<sup>361</sup> See Consol. Edison Co. of New York (Indian Point, Unit No. 2), LBP-82-25, 15 NRC 715, 734 (1982) (internal quotations omitted) (quoting Houston Lighting & Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 396 (1979)); Virginia Elec. & Power Co. (North Anna Nuclear Power Station, Units 1 & 2), ALAB-536, 9 NRC 402, 404 n.2 (1979).

<sup>362</sup> Indian Point, LBP-82-25, 15 NRC at 734.

<sup>363</sup> Allens Creek, ALAB-535, 9 NRC at 396.

the nuclear waste repository specifically – evidenced through its active participation in NRC regulatory and licensing activities and general advocacy in support of the Yucca Mountain repository – we can, under the “organizational objectives” doctrine, presume that both its company and union members have authorized NEI to act on their behalf for all issues for which they themselves could have standing.

Moreover, a supplemental affidavit from an NEI official did expressly state that five major national trade unions are NEI members (and that they expect that members of those unions will be employed at Yucca Mountain).<sup>364</sup> While petitioners may not use their reply pleadings to provide new “threshold support” for their contentions,<sup>365</sup> here NEI simply used its reply to clarify and to develop information included in its initial petition.

It is not of consequence that those unions did not expressly state that they authorized NEI to represent them in this matter. When an organization like NEI takes formal corporate action to initiate litigation not only germane but integral to its purpose (e.g., to file a petition here), that action can constitute the requisite, if implicit, “proof of authorization” that DOE would insist upon.<sup>366</sup> That is how trade associations do business.<sup>367</sup> In any event, utility company members have provided explicit justification for NEI to represent their interests, which, as we have seen, inherently include the protection of their employees.

In light of the Commission’s decision in Palisades,<sup>368</sup> we do not address the question of whether NEI’s member unions have demonstrated here sufficient explicit or implicit

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<sup>364</sup> NEI Reply, Attach. 1, Supplemental Affidavit of Rodney McCullum in Support of NEI’s Standing ¶¶ 2-3 (Feb. 24, 2009).

<sup>365</sup> Louisiana Energy Servs., CLI-04-35, 60 NRC at 623.

<sup>366</sup> DOE NEI Answer at 13 (citing Palisades, CLI-07-18, 65 NRC at 410). Compare Allens Creek, ALAB-535, 9 NRC at 395-97, with Associated Gen. Contractors of North Dakota v. Otter Tail Power Co., 611 F.2d 684, 690-91 (1979).

<sup>367</sup> Hunt v. Washington State Adver. Comm’n, 432 U.S. 333, 342-45 (1977).

<sup>368</sup> CLI-08-19, 68 NRC \_\_\_.

authorization to allow them to speak for their members. In Palisades, where the challenge was to a license transfer that a union was concerned could affect the community and workers, the Commission held that unions could not – in light of the general reasons behind and purposes of their existence – be deemed to be the automatic representatives of their members for purposes of that litigation.<sup>369</sup> Whether that same restriction would apply here – where the unions appear before us in their capacity as NEI members to promote what is presumably the very interest for which their members authorized them to join NEI – is a matter we need not address, since NEI's standing already has sufficient foundation.

We find little to commend DOE's assertion that health and safety impacts felt at distant nuclear plant sites caused by the delay in completion of its proposed repository are outside the scope of the proceeding. To the contrary, our NEPA jurisprudence reflects determinations that off-site impacts caused by on-site activities can support the admissibility of a contention. By parity of reasoning, the same principle can be considered in support of a petitioner's health and safety-based standing, even if the offsite locations cannot be regulated in the proceeding in which standing is sought.<sup>370</sup>

## 2. Discretionary Intervention

In the alternative, NEI maintains that it qualifies for discretionary intervention based upon the six factors in 10 C.F.R. § 2.309(e). The three factors weighing in favor of intervention are: (1) the extent the petitioner's participation "may reasonably be expected to assist in developing a sound record";<sup>371</sup> (2) the nature and extent of the petitioner's interest in the proceeding; and

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<sup>369</sup> Id. (slip op. at 7-9).

<sup>370</sup> See Wolf Creek, CLI-77-1, 5 NRC at 8; see also Detroit Edison Co. (Greenwood Energy Ctr., Units 2 & 3), ALAB-247, 8 AEC 936 (1974). We note that at oral argument, counsel for DOE admitted that DOE's pleading on this issue was not as clear as it might have been and explained that DOE is simply asserting that "the NEI petition alleges that those radiological injuries are attributable not to the proposed activity, which is the Yucca Mountain Repository, not to the application that is before us, but to the sort of ancillary effect of having to continue to store radioactive waste at the nuclear power plants." Tr. at 88-89.

<sup>371</sup> 10 C.F.R. § 2.309(e)(1)(i).

(3) the possible effect of a potential decision on that interest.<sup>372</sup> The three factors weighing against intervention are: (1) the availability of other means to protect the petitioner's interest; (2) the extent that interest will be represented by an existing party; and (3) the extent that the petitioner's participation will "inappropriately broaden the issues or delay the proceeding."<sup>373</sup>

While NEI acknowledges that discretionary intervention is an "extraordinary procedure," it asserts that "this is the extraordinary case in which discretionary intervention should be granted."<sup>374</sup> NEI maintains that: (1) it will assist in developing a sound record, as it will "provide direct, substantive expertise" via its staff, its contractors, and the staff of its members;<sup>375</sup> (2) its members have "a direct and substantial interest" in the proceeding; and (3) any decision that may be issued will directly impact its members. Additionally, NEI argues that the factors weighing against intervention have little weight: (1) there is not another forum to address these issues; (2) no other party will address these issues because no other party supports the Application;<sup>376</sup> and (3) its participation will not unduly broaden or delay the proceeding.<sup>377</sup> NEI points out that its longstanding support of the repository program demonstrates that it is motivated to expedite the proceedings.<sup>378</sup>

DOE maintains that NEI has not shown that it should be allowed discretionary intervention.<sup>379</sup> DOE focuses on two of the six relevant criteria: (1) the extent to which NEI "can

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<sup>372</sup> Id. § 2.309(e)(1)(ii), (iii).

<sup>373</sup> Id. § 2.309(e)(2)(i)-(iii).

<sup>374</sup> NEI Reply at 17-18.

<sup>375</sup> NEI Petition at 7.

<sup>376</sup> NEI asserts that DOE lacks the "vigor and technical expertise" of NEI and its interests are not identical to those of NEI. Id. at 8.

<sup>377</sup> Id.

<sup>378</sup> Id.

<sup>379</sup> DOE NEI Answer at 24-28.

be reasonably expected to assist in developing a sound record;”<sup>380</sup> and (2) “the potential [that NEI’s participation would have] to inappropriately broaden or delay the proceeding.”<sup>381</sup> DOE argues that both factors militate against allowing discretionary intervention.

If NEI were found not to have adequately established its standing as of right, the situation before us presents an appropriate case to permit discretionary intervention. We recognize that the Commission has stated that discretionary intervention is an “extraordinary procedure” that will not be granted “unless there are compelling factors in favor of such intervention.”<sup>382</sup> We agree, however, with NEI that there are compelling factors in this instance to support discretionary intervention for NEI pursuant to 10 C.F.R. § 2.309(e).

NEI’s case for discretionary intervention is similar to that of the Alabama Electric Cooperative in Perry.<sup>383</sup> Alabama Electric Cooperative was a direct beneficiary in another proceeding of license conditions similar to those at issue in that case and argued – even though it did not have an injury-in-fact – that it had a direct interest in the outcome of the case.<sup>384</sup> Alabama Electric Cooperative was allowed discretionary intervention because the Board believed that its interests were within the zone of interests related to the proceeding and that, due to its extensive participation in similar proceedings in the past, it would provide valuable insight in developing a sound record.<sup>385</sup>

NEI’s members are certainly among the intended beneficiaries of the NWPA, if not also the real parties in interest in its implementation through the construction and operation of the proposed repository. There is no other party that we are prepared to say can represent their

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<sup>380</sup> Id. at 24-25; see also 10 C.F.R. § 2.309(e)(1).

<sup>381</sup> DOE NEI Answer at 24, 27-28; see also 10 C.F.R. § 2.309(e)(2).

<sup>382</sup> 69 Fed. Reg. at 2201.

<sup>383</sup> LBP-91-38, 34 NRC 229.

<sup>384</sup> Id. at 248-49.

<sup>385</sup> Id. at 250-51.

interests. Although DOE claims to do so, DOE ignores the years of controversy and litigation between DOE and the nuclear industry over that agency's failure to take title and possession of spent nuclear fuel. The existence of that continuing controversy makes us hesitant to entrust NEI's members' interests entirely to DOE.

NEI's members have represented that they have the expertise to contribute to the development of a sound record and there is no reason to doubt the accuracy of that representation. Among other things, NEI has put forward experts on the TSPA-related contentions it filed.

In short, NEI's reliance upon the general expertise of its members and their employees, and the fact that its members have extensive experience in the handling and storage of spent fuel, is sufficient. On top of the other petitioners' 309 proffered contentions, NEI would add nine more. To be sure, NEI's participation might make the proceeding somewhat more complicated. Nonetheless, given the significance of NEI's status regarding the Yucca Mountain proposal, the complexity of the matter, and the decades of delays on DOE's part in preparing and filing the Application, we find that NEI's ability to enhance the record, particularly as to TSPA matters, far outweighs any delay its participation might cause. Petitioners have been granted discretionary intervention on similar grounds as NEI asserts, as well as for less compelling reasons.<sup>386</sup>

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<sup>386</sup> Id. (granting discretionary intervention to an intervenor that benefited from a similar anti-trust license condition in another proceeding and had previous experience with similar anti-trust matters); Consol. Edison Co. of New York (Indian Point, Unit 2), CLI-82-15, 16 NRC 27, 31 (1982), adopting as its own ruling the one-sentence dictum from LBP-82-25, 15 NRC 715, 736 n.10 (1982) (granting discretionary intervention to a citizens group); Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), LBP-79-1, 9 NRC 73, 87-88 (1979) (would have granted discretionary intervention to a citizens group that had shown that its experts could assist with the proceeding); Pub. Serv. Co. of Oklahoma (Black Fox Station, Units 1 & 2), ALAB-397, 5 NRC 1143, 1148-49 (1977) (granting discretionary intervention to an intervenor who raised unique contentions and provided expert support); Virginia Elec. & Power Co. (North Anna Power Station, Units 1 & 2), ALAB-363, 4 NRC 631, 633-34 (1976) (granting discretionary intervention to an intervenor who raised a serious issue and was well-equipped to make a contribution to the record). We are aware, as the Commission pointed out in Siemaszko, that all of these cases were decided many years ago. Andrew Siemaszko, CLI-06-16, 63 NRC 708, 716-17 (2006). Recognizing how extraordinary the procedure is and how seldom it should be utilized, however, we do not believe that its failure to be invoked (or to be approved by the Commission) in recent times ought to influence our decision today. See id. at 715-24.

We do not think this conclusion conflicts with the Commission's Siemaszko decision, which made clear the hurdles an entity seeking discretionary intervention must overcome.<sup>387</sup> There, discretionary intervention was denied because the group seeking discretionary intervention had filed no contentions of its own,<sup>388</sup> had not demonstrated how its tangible interests (as opposed to its intellectual ones) would be affected by the proceeding, was essentially seeking only to support an existing party (the subject of the enforcement action), and had provided what was deemed insufficient information about the contribution its experts could be expected to make.<sup>389</sup> In contrast, NEI has filed contentions of its own, demonstrated how its real interests will be affected, shown that no other entity can represent its interests, and put forward experts well-versed in the contentions it has advanced. In our judgment, NEI meets the strict discretionary intervention criteria that the Commission re-emphasized in Siemaszko.

#### V. RULINGS ON LSN COMPLIANCE

The LSN compliance of NEI, Nye, Nevada 4 Counties, California, and White Pine has not been challenged. Because Caliente has not established standing, as determined by CAB-01, its LSN compliance need not be addressed. The LSN compliance of other petitioners is discussed below.

##### A. Nevada (CAB-01)

Although not required to do so,<sup>390</sup> Nevada asserts in its petition that it submitted “an adequate and timely initial LSN certification” and “adequate and timely supplemental certifications,” as well as “participated fully in all pre-application phases of this proceeding

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<sup>387</sup> See CLI-06-16, 63 NRC at 715-24.

<sup>388</sup> The dissent points out, with some justification, that the contention requirement might be viewed as ordinarily inapplicable to enforcement proceedings. See id. at 725-26.

<sup>389</sup> Siemaszko, CLI-06-16, 63 NRC at 719-24.

<sup>390</sup> See Section II.B supra.

before two licensing boards and the Commission.”<sup>391</sup> DOE challenges this assertion as failing to meet the requirements for demonstrating substantial and timely compliance under 10 C.F.R. § 2.1012(b)(1).<sup>392</sup> DOE argues that Nevada cannot demonstrate substantial and timely compliance with the LSN requirements because it has not properly reviewed and produced all of its documentary material.<sup>393</sup>

First, DOE alleges that, in a number of Nevada’s proffered contentions, the asserted supporting material for the contention lacks LSN numbers or attached copies of the documents, and concludes, therefore, that Nevada has not produced all of its supporting documentary material.<sup>394</sup> Second, DOE claims that Nevada has not produced all of its non-supporting documentary material, alleging that: (1) the call memos used by Nevada to guide its experts and staff on identifying documentary material do not ask for a review and production of non-supporting material following DOE’s submittal of its Application; (2) Nevada did not update its call memos to remedy a too-narrow interpretation of what constituted non-supporting documentary material, nor did it state in its petition that it updated them; and (3) the small quantity of the material produced after Nevada’s initial certification signifies that Nevada could not have produced all of its non-supporting documentary material.<sup>395</sup> Third, DOE argues that Nevada has not produced all of the reports and studies prepared by or on behalf of Nevada because there are experts who have worked for Nevada for a number of years and DOE therefore suspects that there are likely to be additional reports and studies in existence.<sup>396</sup> Further, DOE declares that, because Nevada’s recent production includes some documents that

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<sup>391</sup> Nevada Petition at 4.

<sup>392</sup> DOE Nevada Answer at 16.

<sup>393</sup> Id.

<sup>394</sup> Id. at 16-17.

<sup>395</sup> Id. at 17-25.

<sup>396</sup> Id. at 25-27.

pre-date Nevada's initial certification, this calls into question Nevada's initial certification and indicates that Nevada's word that it has complied is insufficient to demonstrate compliance.<sup>397</sup>

In its reply, Nevada contends that DOE's arguments are an attempt to re-litigate the challenges that DOE made in its failed motion to strike Nevada's initial LSN certification.<sup>398</sup> Rebutting DOE's challenges to Nevada's production of supporting documentary material, non-supporting documentary material, and documentary material in the form of reports and studies, Nevada maintains that DOE's allegations are based upon mere speculation and an erroneous analysis of its LSN document collection.<sup>399</sup> In addition, Nevada points out that DOE improperly relies on the dissenting opinion from the PAPO Board's ruling denying DOE's motion to strike, notwithstanding the fact that this opinion was rejected by a majority of that Board, whose decision was later affirmed by the Commission on appeal.<sup>400</sup> Nevada argues that DOE has failed to show that any particular document is missing; Nevada reiterates throughout its petition and reply, consistent with its duty to comply with the good faith standard, that if any document is missing, Nevada will provide assistance to DOE in locating the material.<sup>401</sup> Ultimately, Nevada submits that it has acted in good faith to make all of its documentary material available on the LSN and that it is in full compliance with the LSN requirements, and attaches a detailed declaration of one of its counsel personally involved in Nevada's efforts to ensure compliance with all LSN regulations.<sup>402</sup>

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<sup>397</sup> Id. at 26-27; see also id. at 16 (claiming that demonstrating compliance under section 2.1012(b) requires attachment of affidavits or other factual support).

<sup>398</sup> Nevada DOE Reply at 15; see U.S. Dep't of Energy (High Level Waste Repository: Pre-Application Matters), LBP-08-5, 67 NRC 205 (2008), aff'd, CLI-08-22, 68 NRC \_\_ (Sept. 8, 2008).

<sup>399</sup> Nevada DOE Reply at 18-29.

<sup>400</sup> Id. at 15.

<sup>401</sup> See, e.g., Nevada Petition at 14-15; Nevada DOE Reply at 19.

<sup>402</sup> Nevada DOE Reply at 12, 18; id., Attach. 1, Declaration of Charles J. Fitzpatrick ¶¶ 1-3 (Feb. 24, 2009) [Fitzpatrick Decl.].

There is no need for a point-by-point recitation of Nevada counsel's declaration. It suffices to note that it provides a full, complete, and detailed explanation and response to DOE's circumstantial claims. It amply demonstrates that DOE's charges regarding alleged deficiencies in Nevada's LSN document collection are, at best, based upon speculation, conjecture, and erroneous inferences. Counsel's declaration, which forms the underpinnings of Nevada's reply, adequately answers each of DOE's factually unsubstantiated allegations. The declaration spells out the steps Nevada voluntarily took to address each of the points raised by the dissent to the PAPO Board majority's ruling denying DOE's earlier motion to strike Nevada's certification of its LSN document collection,<sup>403</sup> even though Nevada disagreed with the dissent's unsupported position<sup>404</sup> and the majority's ruling was affirmed by the Commission.<sup>405</sup>

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<sup>403</sup> See Nevada DOE Reply at 2, 5-12; Fitzpatrick Decl. ¶¶ 4-5; U.S. Dep't of Energy, LBP-08-5, 67 NRC 205; id. at 218 (Karin, J., dissenting).

<sup>404</sup> See Nevada DOE Reply at 16-17; Fitzpatrick Decl. ¶ 5(h).

<sup>405</sup> See U.S. Dep't of Energy, CLI-08-22, 68 NRC at \_\_, \_\_ (slip op. at 4, 6). In LBP-08-5, 67 NRC at 209-10, the PAPO Board majority held, over a lengthy dissent, that DOE as the movant failed to meet its burden of proof pursuant to 10 C.F.R. § 2.325. The Commission in CLI-08-22, 68 NRC at \_\_ (slip op. at 4), affirmed only that holding.

In its ruling, the PAPO Board majority also responded to the dissent's arguments, identifying two separate and independent reasons why the dissent provided no justification for the rejection of the Nevada certification. Apparently reading the majority's response to the dissent as an additional holding, the Commission neither considered nor expressed any view on it. CLI-08-22, 68 NRC at \_\_ (slip op. at 4). In responding to the dissent's lengthy assertions, the PAPO Board majority concluded that DOE had not raised the numerous factual issues upon which the dissent fixated. LBP-08-5, 67 NRC at 212. Additionally, the majority determined that at the current stage of the proceeding the dissent's legal premise regarding supporting and non-supporting documentary material (DM-1 and DM-2, respectively) within the meaning of 10 C.F.R. § 2.1001 was faulty, stating that:

In short, it is only information that either supports or fails to support a party's "position in the proceeding" that comes within the ambit of DM-1 and DM-2. Yet, manifestly, no potential party (i.e., petitioner) has such a position prior to the institution of the proceeding – an event that necessarily abides the filing and docketing of the license application and the filing of contentions.

Id. at 213 (footnote omitted). In so stating, the PAPO Board majority was merely reiterating the same basic point, ignored by the dissent, that a unanimous PAPO Board had made a mere five months earlier in the FCMO:

After contentions are filed, and the parties take positions, the duty to supplement will expand to a third category. This is because "documentary material" includes information a participant intends to rely on or cite "in support of its position in the proceeding" (Class 1) and information that "does not support that information or

(continued)

In other words, Nevada re-reviewed all of the documents in its possession, although it was not required to do so, to ensure that it did not neglect to produce any documentary material in its initial document production.<sup>406</sup> The declaration also spells out the steps Nevada took to meet the subsequent obligation to review and produce documentary material that arose when DOE's Application was filed and Nevada had taken a position in the proceeding by filing contentions.<sup>407</sup> Indeed, at oral argument, DOE appeared to abandon its challenge to the completeness of Nevada's LSN document production, stating that "[w]e'll accept Mr. Fitzpatrick's [Nevada's counsel] representation."<sup>408</sup>

Thus, as a majority of the PAPO Board previously determined in its decision denying DOE's motion to strike, DOE's challenges here are similarly nothing more than speculation and conjecture that Nevada's LSN production is incomplete.<sup>409</sup> Without a great deal more, there is no basis upon which the Board can or should make what amount to factual findings regarding the insufficiency of Nevada's LSN production.

At this stage of the proceeding, all parties and petitioners already have had the opportunity to challenge, with motions to strike, the LSN certifications of any other parties or petitioners in the pre-license application phase of the proceeding. Absent a credible factual challenge to the sufficiency of the production of documentary material under 10 C.F.R. § 2.1003, all that is now required under the regulations are Nevada's initial and monthly

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that party's position" (Class 2), 10 C.F.R. § 2.1001, and parties cannot assess the full extent of these two classes of documentary material (and produce it) until contentions are filed and positions known. FCMO at 3 n.5. The PAPO Board's FCMO was neither appealed by a potential party nor reviewed by the Commission sua sponte.

<sup>406</sup> Fitzpatrick Decl. ¶¶ 4-5.

<sup>407</sup> Id.

<sup>408</sup> Tr. at 699.

<sup>409</sup> U.S. Dep't of Energy, LBP-08-5, 67 NRC at 210.

supplemental certifications.<sup>410</sup> DOE has not disputed that Nevada made the required certifications, nor could it, because Nevada has shown that it is in substantial and timely compliance with this requirement. Nevada made its initial certification on January 17, 2008,<sup>411</sup> and made certifications of its monthly supplementations thereafter.<sup>412</sup> Nevada was also a full participant in the pre-license application phase of this proceeding.<sup>413</sup> It bears repeating that, although Nevada need not have made its compliance assertions in its petition, and making them in its reply would suffice, Nevada attached to its reply a declaration from counsel indicating the steps Nevada has taken to ensure compliance. Although including such documentation was unnecessary, it more than demonstrates Nevada's substantial and timely compliance with the LSN requirements.

B. Clark (CAB-01)

Although DOE argues that Clark is not in substantial and timely compliance with the LSN requirements, the Board concludes that it is and rejects DOE's arguments to the contrary. Specifically, DOE initially claimed that Clark should be denied party status in this proceeding pursuant to 10 C.F.R. § 2.1012(b)(1) because it failed to address its compliance with the LSN requirements in its petition.<sup>414</sup> As discussed in Section II.B supra, however, section 2.1012(b)(1) requires no such affirmative statement of LSN compliance in the petition. Moreover, it seems

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<sup>410</sup> See 10 C.F.R. §§ 2.1003(e), 2.1009(b); SCMO at 21-22; RSCMO at 21; see also 10 C.F.R. § 2.1012(c).

<sup>411</sup> Nevada Petition at 4.

<sup>412</sup> See, e.g., The State of Nevada's Certification of Compliance (Jan. 17, 2008); The State of Nevada's Certification of LSN Supplementation (Feb. 1, 2008; Feb. 26, 2008; Mar. 31, 2008; Apr. 28, 2008; May 30, 2008; June 27, 2008; July 30, 2008; Aug. 29, 2008; Sept. 29, 2008; Oct. 30, 2008; Nov. 25, 2008).

<sup>413</sup> Nevada Petition at 4.

<sup>414</sup> DOE Clark Answer at 4.

that DOE conceded this point at oral argument,<sup>415</sup> so it would now appear that DOE agrees that Clark's petition should not be denied on this ground.

DOE argues that Clark cannot demonstrate substantial and timely compliance because it has not properly reviewed and produced all of its documentary material as required by 10 C.F.R. § 2.1003. As support for this assertion, DOE questions whether the sixty-nine documents Clark made available on the LSN represent all of Clark's documents "in light of the reported millions of dollars the County has spent on Yucca Mountain-related work product."<sup>416</sup> Additionally, DOE points out that the CVs of two of Clark's experts, Dr. Alvin Mushkatel and Dr. Sheila Conway, cite documents that are not included in Clark's LSN production, and that there are no documents on the LSN that were authored by Clark expert Dr. Dennis Bley.<sup>417</sup> According to DOE, this indicates that Clark has failed to make available all reports and studies "prepared by it or on its behalf" as defined under 10 C.F.R. § 2.1001.<sup>418</sup>

DOE also argues that Clark has not produced all of its non-supporting documentary material because: (1) it did not state in its petition that it conducted a review for this material after it agreed to modify its review procedures in an August 2008 settlement agreement with DOE that resolved DOE's motion to strike<sup>419</sup> Clark's initial LSN certification;<sup>420</sup> (2) "the limited number of documents" produced after Clark modified its procedures, particularly because they are dated within the past few years and a significant percentage of them are not non-supporting

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<sup>415</sup> See Tr. at 692-93.

<sup>416</sup> DOE Clark Answer at 5.

<sup>417</sup> Id. at 5-7.

<sup>418</sup> Id. at 7-8.

<sup>419</sup> See The Department of Energy's Motion to Strike January 16, 2008 Certification of Clark County (Jan. 28, 2008); Jointly Proposed Order on the Department of Energy's Motion to Strike January 16, 2008 Certification of Clark County (Aug. 13, 2008) [Jointly Proposed Order]; PAPO Board Order (Ruling on Department of Energy Motion to Strike Certification of Clark County) (Aug. 26, 2008) (unpublished).

<sup>420</sup> DOE Clark Answer at 8.

documents, indicates that a proper review was not conducted;<sup>421</sup> and (3) there is an absence of internal memoranda and e-mails in Clark's LSN production, which would be the documents "expected to contain non-supporting information."<sup>422</sup> In a footnote, DOE also notes that there is an absence of "graphic-oriented documentary material" as delineated in 10 C.F.R. § 2.1003(a)(2), other than what is included in already-produced reports in Clark's LSN collection.<sup>423</sup>

As Clark points out in its reply, however, "the DOE's efforts to 'prove' that [Clark] has documents that it should have posted but did not are factually incorrect and premised on nothing but the DOE's own conjecture and presumptions."<sup>424</sup> DOE's arguments here are similar to those presented in DOE's failed attempt to strike Nevada's LSN certification in 2008 and DOE's failed attempt to challenge the sufficiency of Nevada's LSN compliance, which was rejected above, in that they are based upon speculation, conjecture, and erroneous inferences. Its arguments fall short of a credible factual challenge to the sufficiency of Clark's production of documentary material under 10 C.F.R. § 2.1003. Moreover, to the extent DOE alleges that Clark lacks the requisite procedures for complying with the LSN requirements, without a showing that Clark reversed its policy for the review and production of documentary material in violation of the August 2008 settlement agreement, DOE would be seeking to undo what was already resolved in that agreement.<sup>425</sup>

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<sup>421</sup> Id. at 8-9.

<sup>422</sup> Id. at 9.

<sup>423</sup> Id. at 8 n.7.

<sup>424</sup> Clark Reply at 9.

<sup>425</sup> See Jointly Proposed Order at 1, stating:

To resolve that Motion, DOE and [Clark] conferred and [Clark] agreed to revise its [LSN procedures], assured DOE that it had and would continue to make available on the LSN all its Documentary Material, implemented document preservation procedures inclusive of e-mails, and agreed to revise its certification language. Accordingly, to resolve DOE's motion, DOE and [Clark] jointly

(continued)

Even assuming DOE had raised a sufficient factual challenge to Clark's LSN document collection, Clark responds to DOE's challenges to the substance of that collection. Clark asserts that "[its] production is in line with its resources, its policies, and the narrow scope of its contentions."<sup>426</sup> Regarding its production of reports and studies, Clark asserts that "[t]he reports or studies that were prepared by Drs. Conway and Mushkatel on behalf of [Clark] have indeed been posted on the LSN timely, and were cited appropriately in [Clark's] Petition."<sup>427</sup>

Clark does not directly address, however, DOE's answer insofar as it points out that an apparent 2007 update of a document listed in Dr. Conway's CV is not included on the LSN even though Clark produced what appears to be a version of the report dated August 2005.<sup>428</sup> If Clark determines the document to have been mistakenly left out of its LSN collection, it should correct its error and produce the document promptly. If that is the case, it does not necessarily mean that Clark would not be in substantial and timely compliance with the LSN requirements. As DOE said in its response to Nevada's 2004 motion to strike its LSN certification in the PAPO proceeding, "[n]o participant's production will attain the unreachable goal of perfection, and no participant's judgment calls will be free from good faith disagreements. Such disputes, however, do not make a participant's certification 'unlawful' or 'invalid.'"<sup>429</sup> That is the nature of the good faith standard embodied in the LSN certification requirement.

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propose that the PAPO Board enter an order allowing [Clark] to substitute a revised certification effective January 16, 2008.

<sup>426</sup> Clark Reply at 9.

<sup>427</sup> Id. at 10.

<sup>428</sup> See DOE Clark Answer at 7.

<sup>429</sup> Answer of the Department of Energy to the State of Nevada's Motion to Strike (July 22, 2004) at 2; see also U.S. Dep't of Energy, LBP-04-20, 60 NRC at 313 & n.26 (pointing out that DOE agrees that "perfection is not required" and "any production is bound to have some 'human mistakes'").

With regard to e-mails and internal memoranda, Clark responds that “substantive discussions relative to the HLW” take place via teleconference or face-to-face meetings.<sup>430</sup> According to Clark, if it did have any e-mails or internal memoranda to produce, its current review procedures would uncover them.<sup>431</sup> Finally, with regard to non-supporting documentary material, Clark asserts that it does not have a duty actively to seek documentary material (i.e., the material must first be in its possession or control to require production) and that it is not required to explain which of its documentary material supports or does not support its position.<sup>432</sup> Clark states that it has met its burden to produce non-supporting documentary material, “and if there are any such documents, they exist on the LSN.”<sup>433</sup>

Absent a credible factual challenge to the sufficiency of Clark’s LSN production, all that is needed with respect to Clark’s compliance is a statement of compliance in its reply. That is what Clark has done here. It states in its reply that it filed its initial LSN certification on January 16, 2008,<sup>434</sup> and has continued to supplement its LSN production since August 2008, which is the date after which DOE withdrew its motion to strike Clark’s initial certification pursuant to the settlement agreement with Clark.<sup>435</sup> In addition, Clark emphasizes that it has performed an adequate review and production of its documentary material<sup>436</sup> and makes the incontrovertible observation that it “cannot post documents that do not exist.”<sup>437</sup>

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<sup>430</sup> Clark Reply at 12-13 & n.26.

<sup>431</sup> Id. at 12.

<sup>432</sup> Id. at 13 & n.29.

<sup>433</sup> Id. at 14.

<sup>434</sup> Id. at 4.

<sup>435</sup> See, e.g., Clark County Certification of Licensing Support Network Supplementation (Feb. 22, 2008; Mar. 28, 2008; Apr. 30, 2008; May 30, 2008; June 27, 2008; July 31, 2008; Aug. 29, 2008; Oct. 1, 2008; Oct. 29, 2008; Nov. 26, 2008; Dec. 30, 2008).

<sup>436</sup> Clark Reply at 9-10, 14.

<sup>437</sup> Id. at 12.

The Board notes that Clark did not attach to its reply a declaration of its compliance as did Nevada (although, as stated above with respect to Nevada, it was not required to do so). Under 10 C.F.R. § 2.304(d)(1) – which is applicable in this proceeding because Subpart J contains no specific signature requirement<sup>438</sup> – an electronic signature on a document serves as the signer’s representation under subsection (d) that “the document has been subscribed in the capacity specified with full authority, that he or she has read it and knows the contents, that to the best of his or her knowledge, information, and belief the statements made in it are true, and that it is not interposed for delay.”<sup>439</sup> In light of the representations that were made by counsel’s signing the reply, Clark’s reply is the functional equivalent of a declaration. Accordingly, the Board finds that Clark’s representations in its reply amply demonstrate that it is in substantial and timely compliance with the LSN requirements.

C. JTS (CAB-02)

Although TIM and TSO are now recognized as a single entity under the name of JTS, looking back we can only consider each entity’s separate compliance with the LSN requirements. As explained below, neither TIM nor TSO has demonstrated substantial and timely compliance pursuant to 10 C.F.R. § 2.1012(b)(1). Thus, going forward, JTS must make a demonstration of subsequent compliance pursuant to section 2.1012(b)(2) before we can grant JTS party status.

1. TIM

In its answer to TIM’s petition, DOE argues that TIM failed to demonstrate substantial and timely compliance with the LSN requirements and, for that reason, must be denied party status under section 2.1012(b)(1).<sup>440</sup> In its reply, however, TIM insists that it complied with all

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<sup>438</sup> See 10 C.F.R. Part 2, Subpart J (even though section 2.304 is not listed in 10 C.F.R. § 2.1001 as a section that takes precedence over the provisions of Subpart J).

<sup>439</sup> 10 C.F.R. § 2.304(d).

<sup>440</sup> DOE TIM Answer at 4-6.

the LSN requirements in a substantial and timely manner, with the exception of the requirement to file a certification under section 2.1009(b).<sup>441</sup> Coincident with its reply, TIM filed a motion, accompanied by a proffered LSN certification, requesting that the Board accept its certification out of time for good cause.<sup>442</sup> In this motion, TIM seeks to demonstrate that “numerous internal and external difficulties” prevented it from filing its initial certification on time.<sup>443</sup> TIM insists, however, that “all documents referenced by the Tribe are either generally publicly available documents, or documents listed on other (potential) parties certified LSNs. Therefore, there is no prejudice to any party including DOE and NRC Staff.”<sup>444</sup>

Although the NRC Staff raises no objection to TIM’s motion, DOE objects on several grounds. First, DOE argues that TIM’s proffered certification addresses the wrong time period – namely, it demonstrates compliance as of March 11, 2009, rather than as of the date on which TIM filed its petition to intervene.<sup>445</sup> This argument demonstrates a misunderstanding of the requirements of Subpart J. As explained in Section II.B supra, the time to judge a petitioner’s compliance cannot come before the petitioner has filed its reply to any DOE and NRC Staff answers – the end point of the petitioner’s request for participation as a party. Thus, TIM’s proffered certification is correct to demonstrate compliance as of March 11, 2009, the date on which TIM filed its reply.

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<sup>441</sup> TIM Reply at 6.

<sup>442</sup> Motion for Certification of Licensing Support Network Out of Time for Good Cause (Mar. 11, 2009) [TIM Motion for LSN Certification].

<sup>443</sup> Id. at 2.

<sup>444</sup> Id. at 5.

<sup>445</sup> The Department of Energy’s Opposition to March 11, 2009 Motion of Timbisha Shoshone Tribe for Certification of Licensing Support Network Out of Time for Good Cause (Mar. 23, 2009) at 4-5 [DOE Answer to TIM Motion for LSN Certification].

Second, DOE argues that TIM's motion fails to demonstrate LSN compliance even as of March 11, 2009.<sup>446</sup> According to DOE, TIM's proffered certification is "facially inadequate" because it provides no information about TIM's LSN procedures.<sup>447</sup> This is a problem, DOE claims, because TIM previously provided DOE with a copy of its procedures on January 13, 2009, and those procedures were seriously deficient.<sup>448</sup> Specifically, DOE alleges, TIM failed to account for certain categories of "documentary material," as defined in section 2.1001, that TIM is required to make available on the LSN under section 2.1003.<sup>449</sup> When DOE notified TIM about alleged deficiencies in its procedures, DOE claims that TIM failed to respond, and instead simply filed its motion for late LSN certification.<sup>450</sup> In DOE's view, the Board cannot accept this late certification without some sort of assurance that TIM has corrected the deficiencies in its procedures.

For its part, TIM insists that DOE's objections to its procedures are "excessive in nature given the circumstances and content/procedures of other certified LSNs."<sup>451</sup> TIM insists that "[t]here is no distinction as to the procedures that the Tribe is following compared with other certified LSNs."<sup>452</sup> Despite this insistence, however, TIM neglects to provide the Board with any examples of procedures drafted by other "certified LSNs". Therefore, we have no measure by which to judge TIM's procedures. In any case, looking at the substance of DOE's objections, the deficiencies it alleges appear to be legitimate. For example, DOE notes that TIM's procedures call for the posting of only "supporting documents material," a small subset of all the

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<sup>446</sup> Id. at 5.

<sup>447</sup> Id. at 6.

<sup>448</sup> Id. at 6-7.

<sup>449</sup> Id. at 7-10.

<sup>450</sup> Id. at 2-4.

<sup>451</sup> TIM Motion for LSN Certification at 5.

<sup>452</sup> Id.

documentary material required on the LSN.<sup>453</sup> Additionally, DOE faults TIM's procedures for suggesting that compliance with section 2.1003 can be achieved by creating a link to a document available on the internet.<sup>454</sup> Indeed, the PAPO Board has made clear that a document's availability on the internet does not authorize its exclusion from the LSN.<sup>455</sup>

As the preceding examples make clear, DOE's challenges to TIM's procedures are more than mere speculation and conjecture, and indeed constitute credible factual challenges to the sufficiency of TIM's documentary production. At the same time, in recognizing DOE's challenges, we do not hold TIM to an impracticable standard. As the PAPO Board has stated, "perfection is not required" and "any production is bound to have some 'human mistakes.'"<sup>456</sup> Still, TIM must make a "good faith" effort to produce all documentary material.<sup>457</sup> If TIM abides by its procedures as written, assuming they have not changed since January 13, 2009, those procedures may well exclude important documentary material from the LSN. Moreover, even though DOE admits it has suffered no prejudice to date,<sup>458</sup> it might suffer prejudice as the proceeding continues beyond the contention admissibility phase. For this reason, we deny TIM's motion for LSN certification out of time; we find that TIM has failed to demonstrate substantial and timely compliance; and we decline to grant TIM, now known as JTS, party status under section 2.1012(b)(1).

Section 2.1012(b)(2), however, allows a person denied admission later to request party status "upon a showing of subsequent compliance with the requirements of § 2.1003." Thus, in accordance with section 2.1012(b)(2), JTS will be admitted as a party in the proceeding once it

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<sup>453</sup> DOE Answer to TIM Motion for LSN Certification at 7.

<sup>454</sup> Id. at 8-9.

<sup>455</sup> U.S. Dep't of Energy, LBP-04-20, 60 NRC at 329-30.

<sup>456</sup> Id. at 313 & n.26.

<sup>457</sup> Id. at 314-15.

<sup>458</sup> Tr. at 567.

has complied with the requirements of section 2.1003. At such time as JTS can demonstrate compliance, JTS will be granted party status, “conditioned on accepting the status of the proceeding at the time of admission.”<sup>459</sup> We advise JTS, however, that in preparing to make a demonstration of subsequent compliance, it should make every effort to consult with DOE as required under section 2.323(b). Indeed, section 2.323(b) is designed to encourage discussion and exchange of information between the parties, so that if filing a motion becomes necessary, the parties can at least inform the Board of what facts remain in contention. The Board suggests that JTS take no more than 45 days to demonstrate subsequent compliance with the LSN requirements.

## 2. TSO

In its amended petition to intervene, TSO asserts that it “has substantially and timely complied with the provisions of Subpart J, including Section 2.1003 and Section 2.1009.”<sup>460</sup> TSO also asserts that it submitted an adequate and timely LSN certification with its original petition on December 22, 2008, and a timely supplemental certification on February 28, 2009.<sup>461</sup>

In its answer, however, DOE challenges TSO’s statement of LSN compliance on several grounds. First, DOE contends that TSO failed to provide an affidavit in support of its “bare assertion” of compliance.<sup>462</sup> As explained in section II.B supra of this decision, however, section 2.1012(b)(1) contains no requirement that a petitioner provide an affidavit along with its petition. TSO’s failure to provide an affidavit does not preclude it from otherwise demonstrating compliance.

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<sup>459</sup> 10 C.F.R. § 2.1012(b)(2).

<sup>460</sup> TSO Amended Petition at 16. Because we grant TSO’s motion for leave to file an amended petition, see Section X.B infra, we now consider the arguments for LSN compliance raised in TSO’s amended petition.

<sup>461</sup> Id. at 17.

<sup>462</sup> DOE Answer to TSO Amended Petition at 19-20.

Next, DOE points to a number of “circumstances” that “call into question” TSO’s assertion of compliance.<sup>463</sup> The first such “circumstance” is TSO’s admission in its February 24, 2009 reply that it “had not fully satisfied each of the NRC’s LSN requirements.”<sup>464</sup> According to DOE, this admission suggests that TSO remained out of compliance on March 5, 2009, when it filed its amended petition. The second of DOE’s cited “circumstances” is TSO’s statement in its reply that “publicly available materials” are exempt from the LSN, even though no such exemption exists in section 2.1005.<sup>465</sup> According to DOE, this statement demonstrates that TSO “has an improperly narrow view of the documentary material it must make available on the LSN.”<sup>466</sup>

Of course, neither of the above-cited circumstances proves that TSO failed to demonstrate substantial and timely compliance. However, given TSO’s failure to address those circumstances in a reply to DOE’s answer, we must treat DOE’s concerns as credible factual challenges to the sufficiency of TSO’s documentary production. As a consequence, we find that TSO has failed to demonstrate substantial and timely compliance with the LSN requirements, and we decline to grant TSO, now known as JTS, party status at this time.

Again, section 2.1012(b)(2) allows a person denied admission to later request party status “upon a showing of subsequent compliance with the requirements of § 2.1003.” Thus, as explained above, JTS will be admitted as a party in the proceeding once it has complied with the requirements of section 2.1003. At such time as JTS can demonstrate compliance, JTS will be granted party status, “conditioned on accepting the status of the proceeding at the time of

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<sup>463</sup> Id. at 22.

<sup>464</sup> Id. at 20 (citing TSO Reply at 17).

<sup>465</sup> DOE Answer to TSO Amended Petition at 21.

<sup>466</sup> Id.

admission.”<sup>467</sup> The Board suggests that JTS take no more than 45 days to demonstrate subsequent compliance with the LSN requirements.

D. NCA (CAB-02)

DOE faults NCA for failing to demonstrate substantial and timely compliance with the requirements of sections 2.1003 and 2.1009 and for failing to comply with all applicable orders of the PAPO Board as required by section 2.1012(c) at the time it filed its petition to intervene.<sup>468</sup> DOE acknowledges that NCA submitted a “Certification of Electronically Available Documentary Material” with its petition to intervene, but it finds that certification to be “facially inadequate.”<sup>469</sup> That certification states that all of NCA’s documentary material has been identified and made electronically available. But, in fact, NCA had posted no documents to the LSN as of that date.<sup>470</sup> Therefore, DOE argues, NCA should not be granted party status in this proceeding.

The Board agrees with DOE that, under section 2.1012(b)(1), it may not admit a party to this proceeding absent a demonstration of substantial and timely compliance with the requirements of section 2.1003. Moreover, we agree that NCA has failed to demonstrate such compliance, given NCA’s admission in its reply that it “may possess some documents not in the record, and within the scope of the regulation.”<sup>471</sup> Thus, we are unable to grant NCA party status at this time. But, as with TIM and TSO, in accordance with section 2.1012(b)(2), NCA will be admitted as a party in the proceeding once it has complied with the requirements of section 2.1003. At such time as NCA can demonstrate compliance, NCA will be granted party status,

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<sup>467</sup> 10 C.F.R. § 2.1012(b)(2).

<sup>468</sup> DOE NCA Answer at 3-4.

<sup>469</sup> Id. at 5.

<sup>470</sup> On May 5, 2009, NCA filed a new Certification of Availability of Native Community Action Council LSN Document Collection. After the time has expired for parties to respond, the certification will be addressed.

<sup>471</sup> NCA Reply at 8.

“conditioned on accepting the status of the proceeding at the time of admission.”<sup>472</sup> Again, the Board suggests that NCA take no more than 45 days to demonstrate subsequent compliance with the LSN requirements.

E. Inyo (CAB-03)

DOE, but not the NRC Staff, challenges Inyo’s substantial and timely compliance with the LSN requirements.<sup>473</sup> As discussed in Section II.B supra, the relevant standard is one of good faith.

In DOE’s answer, DOE discusses Inyo’s LSN production through December 18, 2008. DOE alleges that, as of that date, Inyo’s entire LSN collection consisted of merely 33 documents.<sup>474</sup> DOE describes numerous categories of documents that, in DOE’s view, should exist and yet could not be located in Inyo County’s collection as of December 2008.<sup>475</sup> DOE claims that “Inyo County’s LSN production is materially incomplete on its face.”<sup>476</sup>

In reply, Inyo’s counsel represents that, beginning in January 2009, Inyo reviewed all relevant documents in its possession and in the possession of its contractors to ensure that all responsive documents were identified and placed on the LSN.<sup>477</sup> Based on that review, counsel represents that, during February 2009, the County submitted additional documents to the LSN and that additional documents would be submitted until completion of the review in early March.<sup>478</sup> Counsel for Inyo further represents that, in good faith compliance “all documents in

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<sup>472</sup> 10 C.F.R. § 2.1012(b)(2).

<sup>473</sup> DOE Inyo Answer at 4-9; NRC Staff Answer at 33-34.

<sup>474</sup> DOE Inyo Answer at 6.

<sup>475</sup> See id. at 5-9.

<sup>476</sup> Id. at 5.

<sup>477</sup> Inyo Reply at 5.

<sup>478</sup> Id.

support and in non-support of the County's petition have been submitted to the LSN, or will be submitted to the LSN by early March 2009."<sup>479</sup>

Additionally, counsel explains that, with respect to Inyo's contentions concerning volcanism, there were no significant documents to submit before contentions were filed. According to Inyo's counsel, the County did not contract with the expert who supported those contentions until December 2007.<sup>480</sup> According to counsel, the expert's final report was first submitted to Inyo in January 2009, when it was immediately placed on the LSN (as were all 2008 monthly progress reports from the expert).<sup>481</sup>

The electronic hearing docket indicates that Inyo filed supplemental certifications of its LSN compliance on January 5, January 27, February 17, March 14, and March 25, 2009, and that, subsequent to DOE's review, the County's LSN collection has expanded eleven-fold to include at least 367 documents. Based on those facts, as well as the representations of Inyo's counsel, the Board finds that the County now has demonstrated good faith compliance. Should DOE conclude otherwise after further review of the Inyo's expanded LSN collection, it may file an appropriate motion.

#### VI. RULINGS ON CONTENTIONS

Each CAB analyzed the contentions for which it is responsible to determine whether they meet the six requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi), do not improperly challenge a rule or regulation of the Commission in violation of 10 C.F.R. § 2.335, and otherwise comply with the admissibility standards discussed in Section III supra. As part of that process, the Boards have read, analyzed and discussed the more than 12,000 pages of petitions, answers, and replies that were filed.

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<sup>479</sup> Id.

<sup>480</sup> Id.

<sup>481</sup> Id.

The Boards' decisions to admit a large proportion of proffered contentions is driven by our resolution of the overarching issues that formed the major portions of the DOE and NRC Staff opposition to the proffered contentions.<sup>482</sup> It also involved the Boards' determination that in many respects the opposition to contentions was based on an attempt to address the underlying factual merits, a step that comes at a later stage in the proceeding. Implicit in each Board's rulings on contentions, as well, is the rejection of the specific arguments raised in opposition to that contention.

The contentions proffered by petitioners that have demonstrated standing, and that satisfy the foregoing admissibility standards, are set forth in Attachment A, which identifies the rulings made by each of the three CABs. Each contention listed in Attachment A satisfies the six requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi), does not improperly challenge a rule or regulation of the Commission in violation of 10 C.F.R. § 2.335, and otherwise complies with the admissibility standards discussed above. The contentions listed in Attachment A are admissible.

The contentions proffered by petitioners that have demonstrated standing, but that do not satisfy the foregoing admissibility standards, are set forth in Attachment B, which identifies the rulings made by each of the three CABs. Each contention listed in Attachment B fails to satisfy one or more admissibility requirements. The principal deficiency or deficiencies the applicable CAB found in each such contention are identified in Sections IX-XI infra. The contentions listed in Attachment B are inadmissible.

The CABs, whose members collectively possess more than eighty years experience as NRC judges, recognize that their decisions result in admitting a higher percentage of contentions than has often been the case in other proceedings. In part, this might stem from: (1) the APAPO Board Order,<sup>483</sup> which instructed petitioners to organize their contentions so as

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<sup>482</sup> See Section III supra.

<sup>483</sup> U.S. Dep't. of Energy, LBP-08-10, 67 NRC 450.

to address directly the Commission's specific requirements; (2) the significant resources that many government entities have obviously devoted to preparing their petitions; and (3) the experience and qualifications of most petitioners' counsel and numerous supporting experts.

The Boards, however, have done nothing more nor less than admit contentions that comply with the Commission's pleading requirements and not admit the relatively few that fail to comply. The purpose of those requirements is explained in Oconee<sup>484</sup> – a case that DOE cites more than 400 times in its answers to the petitioners' filings.

In an earlier era, as the Commission explained in Oconee, "Boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation."<sup>485</sup> Intervenor "often had negligible knowledge of nuclear power issues and, in fact, no direct case to present, but instead attempted to unearth a case through cross-examination."<sup>486</sup> In revising its contention admissibility requirements, the Commission sought to preclude a contention from being admitted where an intervenor has "no facts" to support its positions, but rather hopes to use discovery or cross-examination as a "fishing expedition."<sup>487</sup>

The Commission therefore amended its rules to require that contentions have "at least some minimal factual and legal foundation in support."<sup>488</sup> That is all. That is what DOE agreed at oral argument is the standard.<sup>489</sup> As the Commission emphasized in Oconee, the contention requirements were never intended to be turned into a "fortress to deny intervention."<sup>490</sup>

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<sup>484</sup> CLI-99-11, 49 NRC 328.

<sup>485</sup> Id. at 334.

<sup>486</sup> Id.

<sup>487</sup> Id. at 335 (citing 54 Fed. Reg. at 33,171).

<sup>488</sup> Oconee, CLI-99-11, 49 NRC at 334.

<sup>489</sup> Tr. at 260.

<sup>490</sup> Oconee, CLI-99-11, 49 NRC at 335 (citing Peach Bottom, ALAB-216, 8 AEC at 21). On April 10, 2009, in response to a request made during oral argument, DOE submitted five examples of contentions from other proceedings that DOE contends "were better drafted than

The Boards, of course, express no view as to which, if any, admitted contentions might ultimately prove meritorious. The Boards determine only that the admitted contentions satisfy the Commission's pleading requirements.

This complex proceeding will require active case management. As discussed, subsequent briefing on legal issue contentions that will likely affect the outcome of related factual contentions will be required. Because the APAPO Board required petitioners to proffer narrow, single-issue contentions,<sup>491</sup> many contentions appear closely related to other contentions and might ultimately be fit candidates for consolidation or other disposition on a joint basis. It is apparent, for example, that at least twenty of the contentions proffered by petitioners are nearly identical and at least twenty-two are sufficiently similar to warrant grouping together for hearing.<sup>492</sup> Furthermore, in its petition, Nevada grouped its single-issue contentions by subject categories. Consideration will be given to combining many of its contentions, as well as those from other petitioners, into these or similar topic areas. Clearly, close control of discovery will also be necessary, as the Commission's regulations contemplate.<sup>493</sup>

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those of the state of Nevada." Department of Energy Response to Request from the March 31, 2009 Oral Argument (Apr. 10, 2009) at 1. The Boards do not find DOE's examples persuasive. Tellingly, however, admission of even DOE's allegedly superior contentions was opposed by the applicant in four of the five cases – suggesting, perhaps, that applicants all too frequently conflate the adequacy of pleadings with challenges to the merits.

<sup>491</sup> U.S. Dep't of Energy, LBP-08-10, 67 NRC at 454.

<sup>492</sup> For example, the following contentions appear to be identical: INY-SAFETY-003/CLK-SAFETY-006/NEV-SAFETY-153, CLK-SAFETY-003 through -011 with NEV-SAFETY-150 through -158, INY-NEPA-001/CAL-NEPA-021, and INY-NEPA-003 through -005 with CAL-NEPA-022 through CAL-NEPA-024. In addition, CLK-SAFETY-003/CLK-SAFETY-005/CLK-SAFETY-009/CLK-SAFETY-011/NEV-SAFETY-150/NEV-SAFETY-152/NEV-SAFETY-156/NEV-SAFETY-158 are similar in their assessment and modeling of upper crust impacts on volcanism. CLK-SAFETY-004/CLK-SAFETY-008/NEV-SAFETY-151/NEV-SAFETY-155 deal with the period of time to assess volcanism and are sufficiently similar to warrant grouping. Also, INY-NEPA-005/CAL-NEPA-023/CAL-NEPA-024/NYE-NEPA-001 all deal with potential radiological impacts to saturated groundwater resources, while TIM-NEPA-01/NEV-NEPA-21/INY-NEPA-004/INY-NEPA-005/CAL-NEPA-023/CAL-NEPA-024/NYE-NEPA-001 relate to potential impacts from the discharge of this contaminated groundwater.

<sup>493</sup> 10 C.F.R. § 2.1021(a)(5).

The Commission has delegated authority adequate to ensure the careful management that the HLW proceeding requires, and the Boards are confident that it will be exercised appropriately. The proper and efficient conduct of this proceeding will depend on such management, and not on prematurely adjudicating the merits of contentions that have been adequately pled.

VII. RULINGS ON PETITIONS

A. CAB-01

As set forth above, Nevada, Clark, Nye, and White Pine each have at least one admissible contention meeting the requirements of 10 C.F.R § 2.309(f), have standing in accordance with 10 C.F.R § 2.309(d) or are exempt from having to establish standing, and have complied with the LSN requirements of 10 C.F.R. §§ 2.1003, 2.1009, and 2.1012. Therefore, in accordance with 10 C.F.R. § 2.309(a), the Board grants the intervention petitions of Nevada, Clark, Nye, and White Pine and admits them as parties to this proceeding. Because Caliente has failed to establish its standing, the Board denies its intervention petition.

B. CAB-02

As set forth above, California and Nevada 4 Counties each have at least one admissible contention meeting the requirements of 10 C.F.R. § 2.309(f), have standing in accordance with 10 C.F.R. § 2.309(d) or are exempt from having to establish standing, and have complied with the LSN requirements of 10 C.F.R. §§ 2.1003, 2.1009, and 2.1012. Therefore, in accordance with 10 C.F.R. § 2.309 (a), the Board grants the intervention petitions of California and Nevada 4 Counties and admits them as parties to this proceeding.

NCA and JTS likewise each have at least one admissible contention and have established standing, but have not established LSN compliance. At such time as they can demonstrate LSN compliance, each will be granted party status.

C. CAB-03

As set forth above, Inyo and NEI each have at least one admissible contention meeting the requirements of 10 C.F.R. § 2.309(f), have standing in accordance with 10 C.F.R. § 2.309(d)

or are exempt from having to establish standing, and have complied with the LSN requirements of 10 C.F.R. §§ 2.1003, 2.1009, and 2.1012. Therefore, in accordance with 10 C.F.R. § 2.309(a), the Board grants the intervention petitions of Inyo and NEI and admits them as parties to this proceeding.

VIII. RULINGS ON PROCEDURAL MATTERS (CAB-01)

A. Interested Governmental Bodies

The unopposed requests from Eureka and Lincoln to participate as interested governmental bodies, pursuant to 10 C.F.R. § 2.315(c), are granted.

B. Eureka Motion for Leave to File a Reply

On February 24, 2009, Eureka filed a motion for leave to file a reply, with its reply attached, to the answers filed by DOE and the NRC Staff relating to categories of issues and potential contentions on which Eureka intends to participate.<sup>494</sup> Eureka previously filed an unopposed request to participate as an interested governmental participant under 10 C.F.R. § 2.315(c) on December 22, 2008.<sup>495</sup> Eureka does not identify the contentions that it seeks to address in its motion<sup>496</sup> – and, indeed, does not identify the precise answers filed by DOE and the NRC Staff to which it seeks to reply – but merely asserts that it desires to reply to DOE and the NRC Staff with respect to “some of their general arguments” in opposition to the admission of several general categories of contentions.<sup>497</sup>

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<sup>494</sup> Eureka County’s Motion for Leave to File Reply to Oppositions by the U.S. Department of Energy and the NRC Staff to Admission of Contentions on which Eureka County Intends to Participate (Feb. 24, 2009) [Eureka Motion].

<sup>495</sup> Eureka Request.

<sup>496</sup> Eureka County’s Reply to Oppositions by the U.S. Department of Energy and the NRC Staff to Admission of Contentions on which Eureka County Intends to Participate (Feb. 24, 2009) at 2 [Eureka Reply]. Eureka names NEV-NEPA-003, NEV-NEPA-005, and NEV-NEPA-006 as examples of contentions for which it argues the NRC Staff applies an overly high standard for contention admissibility. See id. at 7 n.1. Eureka does not claim, however, that it will be participating on those specific contentions.

<sup>497</sup> Eureka Motion at 2.

The NRC Rules of Practice prohibit Eureka, asking to participate as an interested governmental participant in accordance with 10 C.F.R. § 2.315(c), from filing a reply to DOE's and the NRC Staff's answers. The right to file answers and associated replies with respect to petitions to intervene is governed by 10 C.F.R. § 2.309(h), which provides, in pertinent part that:

(2) Except in a proceeding under 10 C.F.R. § 52.103, the requestor/petitioner may file a reply to any answer. The reply must be filed within 7 days after service of that answer.

(3) No other written answers or replies will be entertained.

(emphasis added). Further, while interested governmental participants are afforded many rights and responsibilities with respect to participation in a proceeding, they are limited to participation on admitted contentions.<sup>498</sup> Thus, all of the rights afforded to interested governmental participants are to apply after contentions have been admitted. Nothing in the rules provides for interested governmental participants to file replies and the plain text of 10 C.F.R. § 2.309(h)(2) and (3) forbids the action requested by Eureka. Accordingly its motion is denied.

C. Nevada's Motion to Amend Petition to Intervene as a Full Party

On January 16, 2009, Nevada filed a motion to amend its petition.<sup>499</sup> In its motion, Nevada seeks leave to amend NEV-SAFETY-003, originally filed in its petition.<sup>500</sup> Nevada bases its motion on the availability of a document containing "close-out information regarding [DOE's] Condition Report CR-6330 at LSN# DEN001606280."<sup>501</sup> Nevada claims that this document relates to the implementation of DOE's Augmented Quality Assurance Program,

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<sup>498</sup> 10 C.F.R. § 2.315(c).

<sup>499</sup> Nevada Motion to Amend.

<sup>500</sup> Nevada Petition at 45-72.

<sup>501</sup> Nevada Motion to Amend at 1-2.

which is part of the discussion in Nevada's original contention, NEV-SAFETY-003. The NRC Staff and DOE filed answers opposing Nevada's motion.<sup>502</sup>

As set forth in Attachment A, NEV-SAFETY-003 is admitted in this proceeding. The Board notes that, at most, the information on which the motion to amend is based is essentially cumulative of that supplied in the contention. Although Nevada claims that "the information upon which the amendment to its contention is based is materially different from information previously available,"<sup>503</sup> a comparison of the content of NEV-SAFETY-003, as filed, with the document referred to in the motion shows that the information upon which the amended contention is based is not materially different from the information that is already included in NEV-SAFETY-003. Therefore, Nevada's motion to amend its contention is denied.

#### IX. DISCUSSION (CAB-01)

The Board provides the following additional discussion concerning the admission of certain contentions, the designation and admission of certain legal issue contentions, and a brief explanation for finding four contentions inadmissible.

##### A. Certain Admitted Contentions

The contentions that CAB-01 finds admissible are identified in Attachment A. Two admitted contentions – NEV-SAFETY-001 and NEV-SAFETY-002 discussed in Sections 1 and 2 below – present issues that are notably different from Nevada's other safety contentions. Therefore, as is more fully explained in Section 3, these contentions may pose unique institutional concerns of special interest to the Commission. Legal issue contentions admitted to this proceeding are discussed in Section 4 below.

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<sup>502</sup> See Corrected NRC Staff Answer to the State of Nevada's Motion to Amend Petition to Intervene as a Full Party (Jan. 26, 2009); U.S. Department of Energy's Answer Opposing State of Nevada's Motion to Amend Petition to Intervene as a Full Party (Feb. 10, 2009).

<sup>503</sup> Nevada Motion to Amend at 1.

1. NEV-SAFETY-001

a. Nevada, DOE and the NRC Staff Arguments

Nevada's first safety contention, NEV-SAFETY-001-DOE Integrity, alleges that "[t]he [Application] cannot be granted because DOE lacks the requisite integrity to be an NRC licensee."<sup>504</sup> In its brief explanation of the basis for the contention, Nevada states that

DOE's continuing and past actions related to Yucca Mountain reveal a pattern of material false statements and omissions and an elevation of schedule considerations over safety and compliance. Taken together, these actions indicate that DOE has a defective safety culture and lack of integrity that are inconsistent with being a responsible NRC licensee.<sup>505</sup>

Citing two cases where the character or integrity of an applicant was at issue, Nevada asserts that DOE's integrity is a proper consideration in a licensing proceeding, which must be addressed under 10 C.F.R. § 63.31(a)(1) and (2) in order for the NRC to find that there is a reasonable assurance of safety.<sup>506</sup>

As support for its contention, Nevada describes instances "as recent as the tendering of the [Application]" "indicating that DOE abetted or tolerated, if not established, a culture in which meeting artificial schedules was more important than safety or compliance, and withheld material safety information from the NRC, with apparent willful intent."<sup>507</sup> For example, Nevada attaches documents that purportedly indicate DOE: (1) "established an artificial deadline of June 30, 2008 for submission of the application" and let it be known that schedule was elevated over a technically defensible and credible license application; (2) continued with the tunneling of the exploratory study facility at Yucca Mountain in order to meet a schedule, despite reports of workers' exposure to toxic silica; and (3) omitted important safety information from the

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<sup>504</sup> Nevada Petition at 16.

<sup>505</sup> Id.

<sup>506</sup> Id. (citing Georgia Tech, CLI-95-12, 42 NRC 111; Georgia Power Co. (Vogtle Elec. Generating Plant, Units 1 & 2), CLI-93-16, 38 NRC 25 (1993)).

<sup>507</sup> Nevada Petition at 18.

Application by excluding a report by the Oak Ridge Institute for Science and Education that criticized DOE's infiltration model.<sup>508</sup> In all, Nevada lists no fewer than forty documents to support its contention.

In its answer, DOE argues that this contention is inadmissible because it: (1) is outside the scope of the proceeding (and therefore is not material to the findings the NRC must make in the proceeding); (2) is not adequately supported; and (3) does not raise a genuine dispute on a material issue of fact or law because it lacks adequate support.<sup>509</sup> In asserting that the contention is outside the scope of the proceeding, DOE claims that section 182(a) of the AEA, which authorizes the NRC to consider the character of the applicant in a licensing proceeding, does not apply to DOE.<sup>510</sup> DOE also points out that Congress designated DOE as the Applicant in the NWPA, making DOE the only appropriate applicant for this licensing proceeding.<sup>511</sup> Accordingly, DOE argues, the contention constitutes an impermissible challenge to the NWPA.<sup>512</sup> The NRC Staff, for the most part, makes similar arguments that this contention is outside of the scope of the proceeding – the only ground on which the NRC Staff asserts that this contention is inadmissible.<sup>513</sup> For these same reasons, DOE also asserts that the issue raised in NEV-SAFETY-001 is not material to the findings the NRC must make regarding DOE's Application.<sup>514</sup>

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<sup>508</sup> Id. at 17-26.

<sup>509</sup> DOE Nevada Answer at 74-75.

<sup>510</sup> See AEA § 182(a), 42 U.S.C. § 2232(a).

<sup>511</sup> DOE Nevada Answer at 75.

<sup>512</sup> Id. at 78-79.

<sup>513</sup> See NRC Staff Answer at 141-42 (asserting that the cases Nevada cites are distinguishable because they do not involve the NWPA or the HLW repository, and characterizing Nevada's contention as a challenge to Congress' designation of DOE as the licensee).

<sup>514</sup> DOE Nevada Answer at 79.

Additionally, DOE argues that Nevada has not provided adequate facts or expert opinion in support of NEV-SAFETY-001.<sup>515</sup> Citing NRC case law, DOE claims that alleged historical deficiencies may not be used as the foundation for a contention.<sup>516</sup> DOE also asserts that allegations of multiple violations alone are insufficient to support a contention, stating that an ongoing pattern must be shown, and that any consideration of the ongoing pattern must include consideration of an applicant's corrective actions as evidence of its good character.<sup>517</sup> Moreover, DOE asserts that, because it is a federal agency, "a 'presumption of regularity attaches to [its] actions,'"<sup>518</sup> and therefore Nevada has an "elevated burden," beyond what the case law imposes, to support its contention with "clear evidence."<sup>519</sup> DOE concludes that Nevada has not made the showing that NRC case law and its status as a federal agency require to support NEV-SAFETY-001.<sup>520</sup> This is tied to DOE's final argument that, because of a lack of sufficient support for NEV-SAFETY-001, Nevada has failed to place DOE's character and integrity in genuine dispute.<sup>521</sup>

With regard to DOE's scope of proceeding and materiality claims, Nevada responds that DOE takes out of context the snippet of legislative history of the AEA purportedly supporting its argument that the character requirement of section 182(a) does not apply to DOE.<sup>522</sup> Nevada points out that section 11 of the AEA defines "person" to include "[g]overnment agenc[ies] other

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<sup>515</sup> Id. at 79-95. In its answer, DOE combines the factual support argument with its argument that Nevada has not raised a genuine issue of material fact or law. For purposes of clarity, these two contention admissibility factors will be discussed separately.

<sup>516</sup> Id. at 80-81.

<sup>517</sup> Id. at 81-82.

<sup>518</sup> Id. at 82 (quoting U.S. Postal Serv. v. Gregory, 534 U.S. 1, 10 (2001)).

<sup>519</sup> DOE Nevada Answer at 82-83.

<sup>520</sup> Id. at 84-94.

<sup>521</sup> Id. at 84.

<sup>522</sup> Nevada DOE Reply at 73.

than the Commission,” as well as state and foreign governments,<sup>523</sup> and other sections in the AEA generally require all “persons” to be licensed when conducting nuclear activities. Thus, Nevada argues, DOE’s position is without merit and the character requirement of AEA section 182(a) applies to DOE as a license applicant notwithstanding the fact that it is a government agency.<sup>524</sup> In addressing DOE’s argument that the designation of DOE as the Applicant in the NWPA precludes any consideration of DOE’s character under the AEA, Nevada points out that section 114(f)(5) of the NWPA explicitly states that “[n]othing in this chapter shall be construed to amend or otherwise detract from the licensing requirements of the [NRC].”<sup>525</sup> Thus, Nevada argues that, in enacting the NWPA, “Congress specifically preserved NRC’s authority under [AEA section 182(a)] to impose such character and safety culture requirements on DOE,”<sup>526</sup> and “[d]esignating DOE as the [A]pplicant is manifestly not the same as designating DOE as a fully qualified licensee.”<sup>527</sup> Because the NRC Staff’s argument regarding the scope of the proceeding is similar to DOE’s, Nevada makes the same arguments in its reply to the NRC Staff’s answer.<sup>528</sup>

With respect to DOE’s combined arguments that NEV-SAFETY-001 is not supported by sufficient facts or expert opinion and thus fails to raise a genuine dispute on an issue of material fact or law, Nevada notes that DOE appears to have misapprehended what is alleged in NEV-SAFETY-001, stating that it “focuses specifically on one aspect of character that is of special relevance to NRC – that aspect of character that embodies organizational safety

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<sup>523</sup> AEA § 11(s), 42 U.S.C. § 2014(s).

<sup>524</sup> Nevada DOE Reply at 73.

<sup>525</sup> Id. at 75.

<sup>526</sup> Id.; see also Nevada NRC Reply at 25 (responding similarly to the NRC Staff’s arguments).

<sup>527</sup> Nevada DOE Reply at 75.

<sup>528</sup> See Nevada NRC Reply at 25.

culture.”<sup>529</sup> Contrary to DOE’s interpretation of the case law that historical information cannot be used to support a contention regarding the applicant’s character, Nevada asserts that to plead an ongoing problem reference to historical information logically must be included.<sup>530</sup> In addition, although it disputes DOE’s assertion that alleging multiple violations is insufficient to support a character-based contention, Nevada does not disagree with DOE’s interpretation of the case law to the extent that it is read as requiring that an ongoing pattern be presented and that pattern be tied to the licensing action in dispute.<sup>531</sup>

Nevada also disputes DOE’s argument that Nevada faces an elevated burden for supporting its contention due to DOE’s status as a government agency, stating that “the cases [DOE] cites do not establish criteria for admission of contentions.”<sup>532</sup> Furthermore, Nevada insists, if the NRC were to apply a presumption of regularity to DOE in reviewing its Application, this would “eviscerate the NRC review process . . . . contrary to section 114(f)(5) of the NWPA,” in that the NWPA does not diminish the NRC’s authority to require applicants to show they meet specific licensing requirements.<sup>533</sup> Finally, Nevada asserts that DOE’s remaining arguments regarding the support provided for Nevada’s contention address the merits of NEV-SAFETY-001, which is improper at the contention admissibility stage.<sup>534</sup> According to Nevada, it has satisfied the requirements for supporting this contention, and “the contention, on its face, raises a material dispute with DOE.”<sup>535</sup>

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<sup>529</sup> Nevada DOE Reply 76.

<sup>530</sup> Id. at 77.

<sup>531</sup> Id. at 77.

<sup>532</sup> Id. at 78.

<sup>533</sup> Id. at 78-79.

<sup>534</sup> Id. at 79-80.

<sup>535</sup> Id. at 76-77.

b. Board Analysis

The Board finds that Nevada has met the contention admissibility factors for NEV-SAFETY-001, and, as noted in Attachment A, admits the contention. Contrary to DOE's characterization, NEV-SAFETY-001 will not "redirect this proceeding" into a "wide-ranging inquiry into the general character and integrity of a department of the United States government."<sup>536</sup> As presented, NEV-SAFETY-001 is a narrowly-drawn contention in which Nevada alleges a pattern of conduct on the part of DOE – largely with respect to Yucca Mountain – that raises the issue of whether DOE has a deficient organizational safety culture where schedule considerations are elevated over safety and compliance with the regulations.<sup>537</sup> Nevada further alleges that this conduct, which includes alleged actions that took place in this very proceeding, is directly relevant to whether the NRC can find, as it is required to do in order to authorize construction of the HLW repository, that there is reasonable assurance of safety under 10 C.F.R. § 63.31.<sup>538</sup>

With regard to the specific admissibility requirements of 10 C.F.R. § 2.309(f)(1), neither DOE nor the NRC Staff disputes that NEV-SAFETY-001 satisfies the admissibility criteria of 10 C.F.R. § 2.309(f)(1)(i) and (ii).<sup>539</sup> The Board finds that Nevada has met these two criteria with its statement of the issue raised and its brief explanation of the basis for the contention.

NEV-SAFETY-001 is also within the scope of this proceeding, as required under 10 C.F.R. § 2.309(f)(1)(iii). The scope of the proceeding is generally established by the Commission in its initial hearing notice and any order referring the proceeding to a licensing

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<sup>536</sup> DOE Nevada Answer at 75.

<sup>537</sup> Nevada Petition at 16; Nevada DOE Reply at 76.

<sup>538</sup> Nevada Petition at 16.

<sup>539</sup> See DOE Nevada Answer at 75; NRC Staff Answer at 141.

board.<sup>540</sup> Here, the Notice of Hearing states that “[t]he hearing will consider the application for construction authorization filed by DOE pursuant to Section 114 of the [NWPAA], 42 U.S.C. 10134, and pursuant to 10 C.F.R. Parts 2 and 63.”<sup>541</sup> The notice further states:

The matters of fact and law to be considered are whether the application satisfies the applicable safety, security, and technical standards of the AEA and NWPAA and the NRC’s standards in 10 C.F.R. Part 63 for a construction authorization for a high-level waste geologic repository, and also whether the applicable requirements of the [NEPA] and NRC’s NEPA regulations, 10 C.F.R. Part 51, have been met.<sup>542</sup>

As discussed above, in its petition and reply Nevada cites NRC case law, 10 C.F.R. Part 63, the AEA, and the NWPAA for its assertion that NEV-SAFETY-001 is within the scope of the proceeding. Nevada has explained how these authorities – which (with the exception of NRC case law) are listed in the Notice of Hearing as the basis for the NRC’s review of DOE’s Application – relate to the issue it raises; thus Nevada satisfies 10 C.F.R. § 2.309(f)(1)(iii) by demonstrating that the issue raised in NEV-SAFETY-001 is within the scope of the proceeding.

As DOE and the NRC Staff would have it, however, the uniqueness of this proceeding, with DOE as a federal agency Applicant, changes the scope inquiry. A review of the applicable law, however, shows that, as stated above, NEV-SAFETY-001 is within the scope of this proceeding.

First, AEA section 182(a) applies to DOE,<sup>543</sup> and nothing in the NWPAA detracts from its application to this proceeding, Congress’ designation of DOE as the Applicant notwithstanding. Section 182(a) provides the general information that must be included in any application for a license issued under the AEA. It states:

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<sup>540</sup> Duke Power Co. (Catawba Nuclear Station, Units 1 & 2), ALAB-825, 22 NRC 785, 790-91 (1985).

<sup>541</sup> 73 Fed. Reg. at 63,029.

<sup>542</sup> Id.

<sup>543</sup> See discussion infra in this Section (providing further explication of the application of AEA section 182(a) through Commission case law).

Each application for a license hereunder shall be in writing and shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant, the character of the applicant, and citizenship of the applicant, or any other qualifications of the applicant as the Commission may deem appropriate for the license.<sup>544</sup>

In support of its assertion that section 182(a) does not apply to DOE, DOE cites a few references to the word “private” in the legislative history, insisting that section 182(a) applies only to private applicants. These references, however, appear in the context of a general discussion of the purpose of the AEA, which recognized that the prior law placed prohibitions on “private participation in atomic energy”<sup>545</sup> and explained that this was being changed to allow the Commission (then the Atomic Energy Commission) to license private industry and private persons.<sup>546</sup> Although this discussion refers to licensing the private sector, it says nothing of this being the only reason for the license criteria in section 182(a).

Furthermore, “person” is defined under section 11(s) of the AEA to include not only private entities, but also “any . . . Government agency other than the Commission,”<sup>547</sup> and a “person,” as the term is used throughout the AEA, is required to be licensed in order to conduct nuclear activities.<sup>548</sup> Thus, in terms of the Commission’s treatment of private entities and government actors under the AEA, there is no difference.

DOE’s reference to the word “character” in the legislative history to support its assertion that a review of an applicant’s character under section 182(a) is linked solely to a concern over

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<sup>544</sup> AEA § 182(a), 42 U.S.C. § 2232(a) (emphasis added).

<sup>545</sup> S. Rep. No. 1699-83, at 9 (1954), reprinted in 1954 U.S.C.C.A.N. 3456, 3464.

<sup>546</sup> Id.

<sup>547</sup> AEA § 11(s), 42 U.S.C. § 2014(s).

<sup>548</sup> See, e.g., AEA § 101, 42 U.S.C. § 2131:

It shall be unlawful, except as provided in section 91, for any person within the United States to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import, or export any utilization or production facility except under and in accordance with a license issued by the Commission pursuant to section 103 or section 104.

access to restricted data is similarly taken out of context. Although this reference in the legislative history explains that access to restricted data requires an investigation of an individual's character, it falls within a discussion of the "information control provisions" of the law. It is not linked to the general license criteria of section 182(a).<sup>549</sup>

Additionally, and contrary to the argument made by DOE and the NRC Staff, Congress' designation of DOE as the Applicant under the NWPA does not alter the fact that section 182(a) applies to DOE. When Congress designated DOE as the Applicant for the HLW repository, it did not abrogate the Commission's review of the Application to be submitted by DOE. To the contrary, in NWPA section 114(d) Congress directed the NRC to "consider an application for a construction authorization for all or part of a repository in accordance with the laws applicable to such applications," and set forth a schedule for the "final decision approving or disapproving the issuance of a construction authorization."<sup>550</sup> Congress thus envisioned a situation where, after the Commission's review, the Commission could find that DOE, although the designated Applicant, would not be the designated licensee.

DOE and the NRC Staff erroneously conflate applicants with licensees in arguing that AEA section 182(a) does not apply in this proceeding. In questioning DOE's safety culture, Nevada is not challenging DOE's designation as the Applicant. Nevada plainly alleges that "DOE has a defective safety culture and lack of integrity that are inconsistent with being a responsible NRC licensee."<sup>551</sup> In other words, Nevada is asserting that, if the NRC finds that DOE's allegedly defective safety culture precludes a finding of reasonable assurance and reasonable expectation of safety under 10 C.F.R. § 63.31(a)(1) and (2), then the construction authorization cannot be granted – not that it should be granted with another entity substituted as the licensee.

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<sup>549</sup> See S. Rep. No. 1699-83, at 7.

<sup>550</sup> NWPA § 114(d), 42 U.S.C. § 10134(d) (emphasis added).

<sup>551</sup> Nevada Petition at 16 (emphasis added).

Furthermore, the NWPA explicitly provides that it does not diminish any part of the Commission's authority to review license applications and issue licenses under the AEA. Section 114(f)(5) of the NWPA states: "[n]othing in this Act shall be construed to amend or otherwise detract from the licensing requirements of the Nuclear Regulatory Commission established in title II of the Energy Reorganization Act of 1974"<sup>552</sup> – for example, the licensing requirements promulgated pursuant to the authority granted to the Commission under the AEA.<sup>553</sup> Significantly, the listing of the statutory authorities appearing at the beginning of 10 C.F.R. Part 63, which outlines the licensing requirements that DOE must meet for its Application to be granted, cites AEA section 182.<sup>554</sup> As Nevada points out, "adequate character and safety culture are 'licensing requirements of the [NRC],' imposed pursuant to section 182[(a)] of the AEA."<sup>555</sup> Although Congress designated DOE as the Applicant, that designation can in no way constrain the Commission's authority to review DOE's Application. Any other interpretation of the AEA would be in direct contravention of Congress' mandate that the NRC, an independent regulatory agency whose duty it is to ensure the public health and safety, perform a full review of the Application.

The plain language of section 114(f)(5) of the NWPA also clearly contradicts DOE's final argument that section 182(a) does not apply to this proceeding because section 121(b) of the NWPA "provides more specific requirements" that supersede the "general provisions" of AEA section 182(a).<sup>556</sup> According to DOE, section 121(b), in authorizing the Commission to "promulgate technical requirements and criteria that it will apply" in its review of the

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<sup>552</sup> NWPA § 114(f)(5), 42 U.S.C. § 10134(f)(5). Title II of the Energy Reorganization Act of 1974 established the NRC.

<sup>553</sup> See, e.g., 10 C.F.R. Part 63 (the AEA is included among the authorities cited for promulgation of Part 63).

<sup>554</sup> See id.

<sup>555</sup> Nevada DOE Reply at 75.

<sup>556</sup> DOE Nevada Answer at 77.

Application,<sup>557</sup> omits reference to a review of the applicant's character.<sup>558</sup> DOE therefore argues that the proceeding is limited "to an inquiry into the technical adequacy of the application, not the general character or integrity of the applicant."<sup>559</sup> This argument, however, ignores the plain language of NWPA section 114(f)(5) stating that nothing in the NWPA detracts from the Commission's other applicable licensing requirements, which would include requirements pertaining to the qualifications of the applicant under the AEA.

Second, although the Commission has not promulgated a rule or regulation requiring an applicant to include information in its application regarding its character pursuant to AEA section 182(a), NRC case law makes clear that an applicant's character is appropriate for consideration in a licensing proceeding. As the Commission has stated:

Commission precedent establishes that lack of either technical competence or character qualifications on the part of licensee or applicant is sufficient grounds for the revocation of a license or the denial of a license application. The Commission has looked to whether a licensee's management displays "the climate, resources, attitude, and leadership that the Commission expects of a licensee." In making determinations about "integrity" or "character," the Commission may consider evidence bearing upon the licensee's "candor, truthfulness, willingness to abide by regulatory requirements, and acceptance of responsibility to protect public health and safety." The past performance of management or high-ranking officers, as reflected in deliberate violations of regulations or untruthful reports to the Commission, may indicate whether a licensee will comply with agency standards, and will candidly respond to NRC inquiries.<sup>560</sup>

In keeping with this approach, as long as the petitioner alleges, with sufficient support, that the applicant's bad character or lack of integrity has direct and obvious relevance to the licensing action at issue in the proceeding, a character-based contention is admissible.<sup>561</sup>

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<sup>557</sup> NWPA § 121(b), 42 U.S.C. § 10141(b).

<sup>558</sup> DOE Nevada Answer at 77 (citing NWPA § 121(b), 42 U.S.C. § 10141(b)).

<sup>559</sup> DOE Nevada Answer at 77.

<sup>560</sup> Vogtle, CLI-93-16, 38 NRC at 31 (internal citations omitted).

<sup>561</sup> See Millstone, CLI-01-24, 54 NRC at 365-66; Georgia Tech, CLI-95-12, 42 NRC at 120-21; Vogtle, CLI-93-16, 38 NRC at 36, 39-42.

It is true, as the NRC Staff points out, that none of these cases “involve[s] repository licensing” or “addresses the unique requirements of the NWPA.”<sup>562</sup> The AEA defines a person to include both private and government entities. Thus, the Board is not at liberty to ignore these clearly applicable precedents merely because there is a federal applicant involved. Accordingly, the Board concludes that NEV-SAFETY-001 is within the scope of this proceeding.

The Board also finds, for the reasons set forth above, that Nevada has met the requirements of 10 C.F.R. § 2.309(f)(1)(iv). Nevada has shown that its character allegations are material to the safety findings that the NRC must make under 10 C.F.R. § 63.31(a)(1) and (2) to support a decision on the Application.<sup>563</sup>

Further, Nevada has provided factual support for its contention sufficient for it to be admitted in this proceeding as required by 10 C.F.R. § 2.309(f)(1)(v). Section 2.309(f)(1)(v) requires “a concise statement of the alleged facts or expert opinions which support the . . . petitioner’s position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the . . . petitioner intends to rely to support its position on the issue.”<sup>564</sup> Additionally, under NRC case law, contentions that raise character and integrity issues must show an ongoing pattern of problems associated with the applicant’s character that have a direct and obvious relationship to the licensing action at issue.<sup>565</sup> As the Commission has explained, the allegations in these types of contentions “must be of more than historical interest.”<sup>566</sup>

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<sup>562</sup> NRC Staff Answer at 142.

<sup>563</sup> See Vogtle, CLI-93-16, 38 NRC at 31 (“The integrity or character of a licensee’s [or applicant’s] management personnel bears on the Commission’s ability to find reasonable assurance that a facility can be safely operated.”).

<sup>564</sup> 10 C.F.R. § 2.309(f)(1)(v).

<sup>565</sup> See Millstone, CLI-01-24, 54 NRC at 365-66; Georgia Tech, CLI-95-12, 42 NRC at 120-21; Vogtle, CLI-93-16, 38 NRC at 36, 39-42.

<sup>566</sup> Georgia Tech, CLI-95-12, 42 NRC at 120.

DOE would have it that, because it is a government agency, a presumption of regularity applies to its actions.<sup>567</sup> Thus, DOE argues, Nevada must support its character-based contentions with “clear evidence.”<sup>568</sup> As discussed above, however, because DOE is a “person” under the AEA like all other license applicants, it does not automatically receive special status by virtue of being a federal agency in proceedings before the NRC. Moreover, the NRC generally presumes that licensees will comply with its regulations;<sup>569</sup> this is likely why the Commission placed “strict limits” on contentions regarding character and integrity issues such that they must present an ongoing pattern that has a direct and obvious relationship to the licensing action at issue in order to be admitted.<sup>570</sup> Thus, there is no merit to DOE’s argument that, when DOE is before the Commission, a heightened standard applies for the admissibility of integrity contentions beyond what is imposed by 10 C.F.R. § 2.309(f)(1) and Commission case law – e.g., a showing of “clear evidence.”

Nevada has provided specific examples of conduct (and has provided documents in support of these examples) on the part of DOE management and employees that occurred over a period of years, continuing to the present, which includes conduct in this licensing proceeding.<sup>571</sup> Nevada alleges that these examples show that DOE elevates schedule over safety concerns and compliance with NRC regulations.<sup>572</sup> DOE accuses Nevada of cherry-picking documents and groups of documents and reading them out of context. Its challenges to the documents and examples of DOE’s conduct, however, improperly focus on the merits of

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<sup>567</sup> DOE Nevada Answer at 82-83.

<sup>568</sup> Id. at 83.

<sup>569</sup> See GPU Nuclear, Inc. (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000) (noting that “[a]bsent [sufficient] support, this agency has declined to assume that licensees will contravene our regulations”).

<sup>570</sup> See Millstone, CLI-01-24, 54 NRC at 366.

<sup>571</sup> See Nevada Petition at 17-26.

<sup>572</sup> See id.

Nevada's allegations.<sup>573</sup> For example, although it might later prove true, as DOE insists, that the author of one of the e-mails Nevada cites was not being literal in his statements,<sup>574</sup> this is properly investigated after the contention admissibility phase when the merits inquiry takes place. And while the case DOE cites indicates that an investigation into the applicant's character should also include a review of the applicant's good character,<sup>575</sup> the procedural posture of that case involved a decision on the merits.<sup>576</sup> In proffering contentions Nevada need not make the full investigation and present both sides of the case. Pursuant to 10 C.F.R. § 2.309(f)(1)(v) and NRC case law, Nevada has provided sufficient support to have its contention admitted.

Finally, Nevada's contention is admissible because it also meets the requirements of 10 C.F.R. § 2.309(f)(1)(vi). Nevada points out that an applicant is not required to address character in the application because the NRC has not promulgated rules or regulations requiring it, and notes that DOE has not addressed its character in the Application.<sup>577</sup> The cases that Nevada cites<sup>578</sup> show that this information is relevant in a licensing proceeding.<sup>579</sup> Further, the Commission has affirmed board findings that a genuine dispute exists despite the fact that character or integrity is not required by regulation to be addressed in the license application.<sup>580</sup>

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<sup>573</sup> See generally DOE Nevada Answer at 84-95.

<sup>574</sup> See id. at 90.

<sup>575</sup> See id. at 82 (citing Houston Lighting & Power Co. (South Texas Project, Units 1 & 2), ALAB-799, 21 NRC 360, 373-74 (1985)).

<sup>576</sup> See South Texas, ALAB-799, 21 NRC 360 (appeal of partial initial decision).

<sup>577</sup> Nevada Petition at 27.

<sup>578</sup> See id. at 16-17.

<sup>579</sup> Georgia Tech, CLI-95-12, 42 NRC at 120-21; Vogtle, CLI-93-16, 38 NRC at 30-32, 36, 39-42.

<sup>580</sup> See, e.g., Vogtle, CLI-93-16, 38 NRC at 41:

We accept arguendo that Commission regulations did not require [the applicant] to include references to character allegations in its application. However, in fairness, we cannot then require that to adequately specify a dispute over a material fact, a petitioner

(continued)

Indeed, when affirming the admission of such a contention, the Commission acknowledged that it had not issued a rule or regulation pursuant to its authority under AEA section 182(a) regarding review of an applicant's character or integrity.<sup>581</sup> With the support Nevada has provided for its contention alleging the presence of a safety issue due to a defective organizational safety culture and lack of integrity on the part of DOE, together with its showing that this issue is material to an NRC licensing decision, Nevada has shown the existence of a genuine dispute on a material issue. Accordingly, the Board finds NEV-SAFETY-001 admissible.

## 2. NEV-SAFETY-002

In its second contention, NEV-SAFETY-002-DOE Management, Nevada alleges that “[t]he [Application] cannot be granted because DOE lacks the requisite management ability to construct and operate a safe repository.”<sup>582</sup> Nevada provides in its brief explanation of the basis for NEV-SAFETY-002 that:

DOE's current and past activities related to Yucca Mountain, as well as its activities with respect to its uniform mismanagement of other large projects, establishes a level of management incapacity on the part of DOE that would jeopardize the design, construction, and operation of a proposed Yucca Mountain repository, would fail to protect the public health and safety and that would fail to comply with NRC requirements, thus rendering DOE unqualified to be an NRC licensee.<sup>583</sup>

NEV-SAFETY-002 differs from NEV-SAFETY-001 in that it does not allege that DOE will choose not to comply with NRC regulations, but rather that it lacks the ability to properly comply with NRC regulations. For contention admissibility purposes, however, these two types of

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must refer to a particular portion of the licensee's application, when the licensee neither identified, nor was obligated to identify, the disputed issue in its application. Such a narrow reading of section 2.714(b)(2)(iii) would have the unintended effect of prohibiting petitioners from raising issues otherwise germane to a proceeding.

<sup>581</sup> Id. at 30-31.

<sup>582</sup> Nevada Petition at 28.

<sup>583</sup> Id.

allegations are treated similarly.<sup>584</sup> Thus, for the reasons discussed above in NEV-SAFETY-001, the Board finds, as noted in Attachment A, that NEV-SAFETY-002 is admissible.

DOE and the NRC Staff's arguments challenging the admissibility of this contention are in large part repeats of the arguments challenging the admissibility of NEV-SAFETY-001,<sup>585</sup> and there is no need to freight this decision with a recounting of them here. It is enough to note that these arguments remain unconvincing. As it does in NEV-SAFETY-001, Nevada points out that NRC case law and the Commission's regulations contemplate a review of an applicant's management competence in a licensing proceeding when the issue is properly raised.<sup>586</sup>

Nevada has raised an issue that, if found to be meritorious, would preclude the NRC from finding reasonable assurance and reasonable expectation of safety under 10 C.F.R.

§ 63.31(a)(1) and (2).<sup>587</sup> Because the NRC's finding of reasonable assurance and reasonable expectation of safety is required before a construction authorization is granted, this issue is within the scope of and material to the findings the NRC must make in this proceeding. Nevada provides sufficient support<sup>588</sup> for this contention with examples of "current and past activities related to Yucca Mountain, as well as [DOE's] activities with respect to its uniform mismanagement of other large projects"<sup>589</sup> to show that a genuine dispute exists on a material issue. Accordingly, the Board finds that NEV-SAFETY-002 is admissible.

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<sup>584</sup> See Vogtle, CLI-93-16, 38 NRC at 31-32 ("Commission precedent establishes that lack of either technical competence or character qualifications on the part of licensee or applicant is sufficient grounds for the revocation of a license or the denial of a license application." (emphasis added)); Louisiana Energy Services, L.P. (Claiborne Enrichment Ctr.), LBP-91-41, 34 NRC 332, 343, 359 (1991); see also Metro. Edison Co. (Three Mile Island Nuclear Station, Unit 1), ALAB-772, 19 NRC 1193, 1206-07 (1984).

<sup>585</sup> See DOE Nevada Answer at 96-112; NRC Staff Answer at 143-45.

<sup>586</sup> Nevada Petition at 28-30.

<sup>587</sup> Id. at 28-29.

<sup>588</sup> See id. at 30-44.

<sup>589</sup> Id. at 28.

3. Institutional Concerns Regarding NEV-SAFETY-001 and -002

A final important comment is in order regarding these contentions.

From an institutional perspective, the Board cannot close its eyes to the apparent incongruity of one federal agency – even though an independent regulatory commission – presiding over and ultimately reaching a decision about the integrity and management competence of another federal department – even though DOE is statutorily defined as a “person” just as any other applicant under the AEA. Although applicable Commission precedent clearly teaches that an applicant’s character and management competence are appropriate issues in a licensing proceeding, an adjudication in the unique circumstances of the Yucca Mountain proceeding may present an institutional policy issue that the Commission may wish to consider. Accordingly, the Board believes it is appropriate to call this matter to the attention of the Commission.

4. Legal Issue Contentions

The following contentions assigned to CAB-01 are designated legal issue contentions by Nevada<sup>590</sup> and are admitted as such:

NEV-SAFETY-004	Content of Quality Assurance Program
NEV-SAFETY-005	Emergency Plan
NEV-SAFETY-006	Part 21 Compliance
NEV-MISC-002	Alternate Waste Storage Plans

The Board also identifies the following contentions as legal issue contentions and finds them admissible:

NEV-SAFETY-009	Increasing CO <sub>2</sub> Levels on Future Climate Projections
NEV-SAFETY-010	Consideration of Forcing Functions on Future Climate Projections
NEV-SAFETY-011	Human Induced Climate Changes on Prediction of the Next Glacial Period
NEV-SAFETY-012	Projections of Future Wetter Climate Conditions
NEV-SAFETY-013	Future Climate Projections Need to Include Extreme Precipitation Events
NEV-SAFETY-019	Future Infiltration Projections Need to Include Reduced Vegetation Cover
NYE-SAFETY-004	Failure to Fully Consider Possible Air Quality and Radiological Changes due to Pre-Closure Construction and Operational Activity

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<sup>590</sup> Id. at 14, 73, 76, 80, 1147.

While the underlying factual components of these Board-identified contentions meet all the admissibility criteria, a legal issue may preclude their further consideration in this proceeding. For example, NEV-SAFETY-009,<sup>591</sup> NEV-SAFETY-010,<sup>592</sup> NEV-SAFETY-011,<sup>593</sup> NEV-SAFETY-012,<sup>594</sup> NEV-SAFETY-013,<sup>595</sup> and NEV-SAFETY-019<sup>596</sup> relate to the effect of climate change for either the pre-10,000 year period or the post-10,000 year period or both. Prior to further assessing these contentions, the legal issues must be briefed.

The Board notes that NEV-SAFETY-010,<sup>597</sup> listed above, is a contention of omission alleging that DOE ignored the basic aspects of climate forcing functions relevant to the prediction of climate change over the next 10,000 years, thereby rendering the conclusions regarding long-term climate projections inaccurate and incomplete. Even though Nevada's references to the SAR are erroneous and were not corrected in Nevada's reply,<sup>598</sup> the contention still meets admissibility requirements because a contention of omission need not necessarily address a specific section of the SAR.

NYE-SAFETY-004<sup>599</sup> alleges that DOE has inadequately<sup>599</sup> considered the radiation dose to members of the public from naturally occurring radon and its decay products emitted as a result of repository construction and normal operations. The threshold legal issue of what authority, if any, the NRC has to regulate radon and its daughters will require further briefing.

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<sup>591</sup> Id. at 92.

<sup>592</sup> Id. at 97.

<sup>593</sup> Id. at 102.

<sup>594</sup> Id. at 107.

<sup>595</sup> Id. at 113.

<sup>596</sup> Id. at 142.

<sup>597</sup> Id. at 97.

<sup>598</sup> Id.; DOE Nevada Answer at 165-66.

<sup>599</sup> Nye Petition at 44.

Finally, the Board notes that NEV-SAFETY-041<sup>600</sup> also presents a legal issue. NEV-SAFETY-041 first alleges that DOE's exclusion of land-surface erosion as a FEP is incorrect because erosion studies and actual observations show that down cutting into the superficial formations will significantly change the modeling boundary conditions well before 10,000 years, and will erode the whole crest of the mountain within 1,000,000 years to depths below the elevation of the emplacement drifts. The component regarding whether DOE should have screened the erosion FEP for the first 10,000 years is admitted. Whether DOE is required to extend its assessment of FEPs excluded for the pre-10,000 year period to the period beyond 10,000 years after closure, and to what extent it must provide support regarding only the post-10,000 year period for erosion, is admitted as a legal issue component of the contention.

B. Inadmissible Contentions

As identified in Attachment B, CAB-01 finds the following contentions inadmissible:

NEV-MISC-001	Erosion and Geological Disposal
CLK-SAFETY-001	DOE's Inadequate Treatment of Uncertainty
CLK-SAFETY-012	DOE's Prior Institutional Failures Render It Unfit to be Licensee
NYE-JOINT-SAFETY-005	Lack of NIMS in Emergency Planning

NEV-MISC-001,<sup>601</sup> designated a legal issue by Nevada, posits that construction authorization cannot be granted because, as alleged in NEV-SAFETY-041, "Yucca Mountain will erode to the level of the repository drifts beginning around 500,000 years after waste emplacement."<sup>602</sup> Nevada argues that:

exposing the waste packages to the atmosphere, with the result that for the period after about 500,000 years and continuing throughout the period of geologic stability (defined as 1,000,000 years), the facility will no longer constitute a "repository" but would, at best, constitute a retrievable storage facility, in violation of sections 2(18), 114(d), 141(g) and 302(d) of the NWPA,

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<sup>600</sup> Nevada Petition at 238.

<sup>601</sup> Id. at 1144.

<sup>602</sup> Id.

section 801(a) of the EnPA, and Public Law No. 107-200 (42 U.S.C. § 10135 note).<sup>603</sup>

The contention does not satisfy section 2.309(f)(1)(vi) because it does not present a genuine dispute on a material issue of law or fact. The contention raises a legal issue that depends upon resolution of factual issues presented in NEV-SAFETY-041. If those factual issues are ultimately proven valid, the Application fails and the legal issue raised in NEV-MISC-001 is moot. If, on the other hand, the factual issues underlying NEV-SAFETY-041 are invalid, then this legal issue contention is irrelevant. Accordingly, NEV-MISC-001 is inadmissible.

CLK-SAFETY-001 states that DOE's evaluation of risk is unreliable and fails to comply with the safety requirements of 10 C.F.R. Part 63. Clark states that the "[t]reatment of uncertainty in the SAR is neither complete, integrated, nor unbiased."<sup>604</sup> Further, it states that "three important sources of uncertainty that impact the SAR results – data assumptions, model assumptions, and methods assumptions – appear in the SAR primarily as assumptions, screening 'analyses,' and claims of conservatism, and are presented without associated technical bases."<sup>605</sup> The Board finds that CLK-SAFETY-001 is inadmissible because it does not provide the necessary facts or expert opinion required by 10 C.F.R. § 2.309(f)(1)(v). The contention also fails to provide sufficient information to show that there is a genuine dispute of material issue of fact or law as required by 10 C.F.R. § 2.309(f)(1)(vi).

CLK-SAFETY-012 alleges that "DOE lacks the requisite institutional integrity to be granted a license to construct and operate a repository in a safe and secure manner for high level radioactive waste and spent nuclear fuel at Yucca Mountain."<sup>606</sup> With the notable exception of the quality of the support Clark proffers for its contention, this contention is

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<sup>603</sup> Id.

<sup>604</sup> Clark Petition at 3.

<sup>605</sup> Id.

<sup>606</sup> Id. at 85.

generally similar to Nevada's NEV-SAFETY-001 challenging whether DOE has the requisite integrity to be an NRC licensee. And like the arguments of DOE and the NRC Staff contesting the admissibility of NEV-SAFETY-001, those same arguments are repeated in their opposition to CLK-SAFETY-012. With the exception of DOE's assertion that the contention lacks adequate support and for the reasons previously detailed regarding NEV-SAFETY-001, those DOE and NRC Staff arguments remain unavailing. Unlike NEV-SAFETY-001, however, CLK-SAFETY-012 is inadmissible for failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v). None of the proffered support for its contention shows, as it must under Commission precedent, an ongoing pattern of problems associated with the Applicant's character that has a direct and obvious relationship to the grant of a construction permit for the Yucca Mountain repository.<sup>607</sup> For example, Clark's primary support rests upon its lessons learned report about DOE's Waste Isolation Pilot Plant (WIPP) facility in Carlsbad, New Mexico,<sup>608</sup> but that material fails to establish the requisite connection in either time or subject matter between the WIPP-related claims and the Yucca Mountain licensing action. Similarly, the County's reliance upon a recent Government Accountability Office Report purportedly criticizing DOE's ineffectiveness in managing other projects and an eight-year-old DOE Inspector General Report criticizing statements in DOE repository evaluation documents<sup>609</sup> falls far short of establishing this same required direct and timely nexus. Accordingly, CLK-SAFETY-012 is inadmissible.

NYE-JOINT-SAFETY-005 alleges that DOE has "failed to include key interoperability and standardized procedure and terminology requirements of the National Incident Management System (NIMS)" in its Emergency Planning required as part of its SAR.<sup>610</sup> As a result, Nye asserts that it and other offsite agencies are unable to plan properly and respond to

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<sup>607</sup> See Millstone, CLI-01-24, 54 NRC at 365-66; Georgia Tech, CLI-95-12, 42 NRC at 120-21; Vogtle, CLI-93-16, 38 NRC at 36, 39-42.

<sup>608</sup> Clark Petition at 87-88.

<sup>609</sup> Id. at 88 (citations omitted).

<sup>610</sup> Nye Petition at 56.

onsite emergency actions as required by 10 C.F.R. §§ 63.161 and 72.32(b). The contention is inadmissible as beyond the scope of the proceeding in violation of 10 C.F.R. § 2.309(f)(1)(iii), for not providing necessary facts or expert opinion as required by 10 C.F.R. § 2.309(f)(1)(v), and for failing to provide sufficient information to show that there is a genuine dispute of material issue of fact or law as required by 10 C.F.R. § 2.309(f)(1)(iv). Whether requirements of other federal agencies have been met is not a proper subject for this NRC proceeding.

X. DISCUSSION AND RULING ON MOTION (CAB-02)

A. NCA Contentions

NCA submitted three contentions with its original petition, but it did not label those contentions as either “safety” or “environmental.” The Board therefore adopts the labels given to these contentions by the NRC Staff in its answer, treating the first two contentions as NCA-MISC-001 and NCA-MISC-002 and treating the third contention as NCA-NEPA-001. As explained below, the Board admits NCA-MISC-001 and notes further briefing on the legal issue will be required. NCA-MISC-002 is inadmissible as explained below and the Board finds NCA-NEPA-001 admissible.

1. NCA-MISC-001

In this contention, NCA claims that DOE’s Application fails to comply with 10 C.F.R. § 63.121(a)(1) and (2) because the Western Shoshone Nation retains an interest in the land surrounding Yucca Mountain.<sup>611</sup> To the extent that it relies on the Treaty of Ruby Valley, the contention is inadmissible for the reason that any title to the land conferred by that treaty were long ago extinguished.<sup>612</sup> Otherwise, the contention is admissible as raising a viable legal issue.

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<sup>611</sup> NCA Petition at 7-10.

<sup>612</sup> See United States v. Dann, 470 U.S. 39, 41-42 (1985); DOE NCA Answer at 51 (citing Final Supplemental EIS for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada Vol. I at 3-8); NRC Staff Answer at 1543-44.

2. NCA-MISC-002

In this contention, NCA alleges that “[w]ater right [sic] are a reserved property interest not ceded to the [United States] by the Treaty of Ruby Valley.”<sup>613</sup> Therefore, NCA contends, DOE cannot obtain water rights sufficient to meet the requirements of 10 C.F.R. § 63.121(b) and (d). As a separate argument, NCA “challenges the DOE application as materially incomplete because it fails to consider the Western Shoshone Nation’s jurisdiction over the water rights within Newe Sogobia or the needs of the Newe individually or collectively.”<sup>614</sup>

In its reply, NCA cites two federal court cases for the proposition that the Western Shoshone Nation retains its water rights even after its land rights have been extinguished.<sup>615</sup> When asked about those cases at oral argument, NCA explained that federal courts have “consistently said that the destruction of – by the United States, by Congress, of the tribe’s land interest does not destroy reserved hunting, fishing, gathering, water rights.”<sup>616</sup> However, when pressed on this point, NCA admitted that those reserved hunting, fishing, gathering, and water rights must originate in a treaty in order to survive. And NCA counsel was unable to point to language in the Treaty of Ruby Valley which specifically reserves water rights to the Western Shoshone Nation.<sup>617</sup> Thus, contrary to NCA’s claim, the Western Shoshone Nation cannot claim jurisdiction over the water rights at issue here. Because these alleged water rights form the sole ground for this contention, it raises an issue that falls outside the scope of this proceeding. Accordingly, NCA-MISC-002 is inadmissible because it fails to comply with the requirements of 10 C.F.R § 2.309(f)(1)(iii).

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<sup>613</sup> NCA Petition at 10.

<sup>614</sup> Id. at 11.

<sup>615</sup> NCA Reply at 24-25; (citing United States v. Winans, 198 U.S. 371 (1905); United States v. Adair, 723 F.2d 1394 (9th Cir. 1983)); see also Tr. at 533-34.

<sup>616</sup> Tr. at 550.

<sup>617</sup> Tr. at 556.

## B. JTS Contentions

As previously explained, the contentions of JTS are deemed to consist of all the contentions proffered by TIM and TSO in their respective petitions to intervene. For its part, TIM proffered eight NEPA contentions, which will henceforth be identified as JTS-NEPA-001 through JTS-NEPA-008. TSO proffered two contentions in its amended petition to intervene, one of which TSO withdrew in its reply to DOE's answer.<sup>618</sup> Because the Board allows TSO to file an amended petition, as discussed below, CAB-02 now recognizes the sole remaining contention in TSO's amended petition as JTS-NEPA-009. Thus, in effect, JTS has proffered a total of nine NEPA contentions, numbered JTS-NEPA-001 through JTS-NEPA-009.

### 1. TSO's Motion for Leave to File Amended Petition

TSO's history as a petitioner in this proceeding, while relatively short, is complex. In its original petition to intervene, TSO proffered three contentions, two miscellaneous and one NEPA, which were substantially identical to those proffered by NCA. In its reply, however, TSO withdrew the two miscellaneous contentions, retaining a single NEPA contention.<sup>619</sup> Then, a week later, TSO filed a motion for leave to file an amended petition, to be considered only if the Board determined that TSO's original petition failed to state at least one admissible contention.<sup>620</sup> The amended petition contains one NEPA contention and one miscellaneous contention. Both DOE and NRC Staff filed answers to TSO's amended petition, and in its reply to the NRC Staff's answer, TSO withdrew its sole miscellaneous contention.<sup>621</sup> Because the Board allows TSO to file an amended petition, as discussed below, just one NEPA contention remains.

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<sup>618</sup> TSO Reply to NRC Staff Answer to TSO Amended Petition at 6-7.

<sup>619</sup> TSO Reply at 22 n.12.

<sup>620</sup> TSO Corrected Motion for Leave at 1.

<sup>621</sup> TSO Reply to NRC Staff Answer to TSO Amended Petition at 6-7.

TSO seeks to file its amended petition on two alternative grounds. First, TSO argues that the motion should be granted, pursuant to 10 C.F.R. § 2.309(f)(2), because the amended petition is “based on information that was not previously available and is materially distinct from the information that was available.”<sup>622</sup> Alternatively, TSO contends that the 10 C.F.R. § 2.309(c)(1) factors for nontimely filings “weigh in favor of granting the Motion.”<sup>623</sup> In its answer, DOE objects to the motion on both alternative grounds.<sup>624</sup> The NRC Staff, however, believes that TSO has demonstrated “good cause” for its late filing, and therefore the motion should be granted under section 2.309(c)(1).<sup>625</sup>

To begin, TSO’s amended petition is clearly not acceptable as a non-timely filing under section 2.309(f)(2). TSO insists that its amended petition relies on information that “was not previously available.”<sup>626</sup> In fact, this “newly available information” amounts to nothing more than affidavits prepared by TSO’s own experts.<sup>627</sup> Assuming the information underlying those affidavits was available at the time TSO filed its original petition, the affidavits themselves cannot constitute previously unavailable information. As the NRC Staff points out, “[t]he information contemplated by § 2.309(f)(2) is not information created, developed, and adduced by the very petitioner who proposes to use it to support his non-timely contentions under a guise of timeliness.”<sup>628</sup> Therefore, the Board does not grant TSO’s motion based on section 2.309(f)(2).

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<sup>622</sup> TSO Corrected Motion for Leave at 2.

<sup>623</sup> Id.

<sup>624</sup> DOE Answer to TSO Amended Petition at 3-17.

<sup>625</sup> NRC Staff Answer to TSO Amended Petition at 4-5.

<sup>626</sup> TSO Corrected Motion for Leave at 10-11; see also 10 C.F.R. § 2.309(f)(2)(i).

<sup>627</sup> TSO Corrected Motion for Leave at 10.

<sup>628</sup> NRC Staff Answer to TSO Amended Petition at 7.

On the other hand, TSO's amended petition is appropriately treated as a nontimely filing under 10 C.F.R. § 2.309(c)(1). As the NRC Staff points out, "good cause" is the most important factor to be weighed in allowing an untimely filing under section 2.309(c)(1).<sup>629</sup> TSO identifies a number of factors that prevented it from completing its petition on time, including the ongoing leadership dispute with TIM, TSO's inability to obtain funds from DOE, and TIM's alleged interference with TSO's records and resources.<sup>630</sup> Accordingly, TSO has established good cause for its late filing. Because the remaining section 2.309(c)(1) factors also generally weigh in favor of granting the motion, the Board grants TSO's motion for leave to file an amended petition. Therefore, the Board declines to consider the contentions proffered in TSO's original petition and admits TSO-NEPA-001 under its new label, JTS-NEPA-009. The Board finds all nine of JTS's NEPA contentions to be admissible, with the sole exception of JTS-NEPA-002, which is discussed below.

## 2. JTS-NEPA-002

In JTS-NEPA-002, TIM (now recognized as JTS) challenges DOE's proclamation in its EIS that NWSA section 114(f)(2) and (3) relieves DOE of its NEPA responsibility to consider all alternatives to a repository at Yucca Mountain.<sup>631</sup> TIM maintains that DOE is nonetheless required under NEPA to consider an alternative repository configuration at Yucca Mountain, and specifically contends that DOE's environmental review under NEPA should consider a surface-based storage facility or near-surface storage facility.<sup>632</sup> While TIM concedes that NWSA section 114(f)(2) excuses DOE from considering alternatives to isolation in a repository, it asserts that the same statute provides no descriptors indicating that the repository need be

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<sup>629</sup> Id. at 3; see also Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-05-24, 62 NRC 551, 564 (2005).

<sup>630</sup> TSO Corrected Motion for Leave at 6-7.

<sup>631</sup> TIM Petition at 25-26.

<sup>632</sup> Id. at 24.

“deep” or “mined.”<sup>633</sup> TIM also maintains that the geographic area under consideration for repository operations extends beyond the limits of Yucca Mountain physiographically, and that section 114(f)(3) of the NWPA “offers DOE no relief from broadening the definition of ‘Yucca Mountain’ in a practical sense,”<sup>634</sup> and hence from studying physiographical alternatives thereto.

As stated by DOE, the NWPA expressly precludes DOE from the need to consider “alternatives to geologic disposal, or alternative sites to the Yucca Mountain site,”<sup>635</sup> and defines “repository” as “any system licensed by the Commission that is intended to be used for, or may be used for the permanent deep geologic disposal of high-level radioactive waste and spent nuclear fuel.”<sup>636</sup> Contrary to TIM’s interpretation of the NWPA, the Commission is therefore prevented from considering alternatives to deep, geologic disposal at Yucca Mountain. Thus, TIM’s assertion that DOE need analyze alternatives that are surface-based and not “deep” or “mined” is in direct conflict with this statutory requirement and outside the scope of this proceeding. Therefore, the Board finds JTS-NEPA-002 inadmissible because it does not meet the requirements of 10 C.F.R § 2.309(f)(1)(iii). It also fails to present a genuine dispute on a material issue of fact or law as required by 10 C.F.R § 2.309(f)(1)(vi).

We note that CAB-01 has admitted NEV-NEPA-022, a contention that might appear facially similar to JTS-NEPA-002. Upon closer examination, however, NEV-NEPA-022 is distinguishable. Nevada takes issue with DOE’s analysis of two no-action alternatives in DOE’s Final EIS (FEIS), arguing that “neither alternative is likely, reasonable or feasible and instead both alternatives are remote and speculative.”<sup>637</sup> Unlike TIM, Nevada does not insist that DOE

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<sup>633</sup> Id. at 26.

<sup>634</sup> Id.

<sup>635</sup> NWPA § 114(a)(1)(D), 42 U.S.C. § 10134(a)(1)(D).

<sup>636</sup> NWPA § 2(18), 42 U.S.C. § 10101(18) (emphasis added).

<sup>637</sup> Nevada Petition at 1132.

undertake an analysis of alternatives that the NWPA prohibits DOE from considering. Rather, it criticizes the no-action alternatives that DOE has already analyzed in its FEIS.

C. Certain California and Nevada Contentions

1. CAL-NEPA-005

CAL-NEPA-005 asserts that DOE's environmental documents present "an incomplete and inaccurate project description that describes Yucca Mountain as having only a capacity of 70,000 metric tons heavy metal"<sup>638</sup> with a portion of that amount being transported through California, when it is reasonably foreseeable that Congress at DOE's request may authorize a capacity up to four times that total. The current capacity of the repository is fixed at 70,000 metric tons by section 114(d) of the NWPA. Because, in these circumstances, the significance of the current capacity limitation is unclear, CAL-NEPA-005 is admitted as a legal issue contention.<sup>639</sup>

As discussed below, two California contentions are not admitted.

2. CAL-NEPA-009

In this contention, California contends that DOE refused to hold public meetings on its Repository SEIS in areas of maximum population and potential environmental impacts in the State of California, "despite explicit and specific requests from California that it hold such public hearings."<sup>640</sup> Thus, California maintains, DOE's environmental documents are inadequate and incomplete, and they fail to comply with NEPA's procedural requirements.<sup>641</sup>

Despite its claim that DOE has not complied with NEPA, California does not refer to any of the regulations implementing NEPA or explain how DOE's actions failed to meet those regulations. Nor does California indicate how the NRC's findings pursuant to 10 C.F.R.

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<sup>638</sup> California Petition at 37.

<sup>639</sup> NWPA § 114(d), 42 U.S.C. § 10134(d).

<sup>640</sup> California Petition at 50.

<sup>641</sup> Id.

§ 63.31(c) would be affected by DOE's alleged failure to conduct public hearings. Thus, California fails to demonstrate that the issue raised in this contention is material to the findings the NRC must make.<sup>642</sup> Moreover, pertinent NEPA regulations do not even specify the number or location of public meetings required to satisfy an agency's public review process for its environmental document.<sup>643</sup> Therefore, the Board finds CAL-NEPA-009 inadmissible because it does not meet the requirement of 10 C.F.R. § 2.309(f)(1)(iv).

### 3. CAL-NEPA-016

In CAL-NEPA-016, California asserts that DOE did not follow the National Academy of Sciences recommendation for an independent analysis of security measures for transport of HLW and, as a result, failed to include "essential security and environmental information required by the NRC regulations."<sup>644</sup> California argues that the NRC, by adopting DOE's environmental documents, does not comply with 10 C.F.R. § 63.31(b) and (c) because, without the necessary independent review, the NRC could not determine that the activities will not be inimical to the common defense and security.<sup>645</sup>

California has not demonstrated any link to a NEPA requirement or an NRC regulation. The Board finds that CAL-NEPA-016 is not within the scope of this proceeding and therefore is inadmissible under 10 C.F.R. § 2.309(f)(1)(iii).

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<sup>642</sup> 10 C.F.R. § 2.309(f)(1)(iv).

<sup>643</sup> See 40 C.F.R. § 1506.6 (Agencies shall "[h]old or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency."). Although the NRC's regulations do not specifically address public meetings, the NRC Staff "usually conducts a public meeting or meetings near the site of the proposed action to receive public comments." See Division of Waste Management, Office of Nuclear Material Safety and Safeguards, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, NUREG-1748 (Aug. 2003) at 4-17 (ADAMS Accession No. ML032450279).

<sup>644</sup> California Petition at 78.

<sup>645</sup> Id. at 79.

4. NEV-SAFETY-130

NEV-SAFETY-130 challenges DOE's Drip Shield Emplacement Plan, Equipment, and Schedule.<sup>646</sup> Although the Board finds that NEV-SAFETY-130 meets all the requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi) and is admissible, we note that the contention's invocation of questionable Congressional funding does not provide foundational support for the contention.<sup>647</sup>

XI. DISCUSSION (CAB-03)

A. Certain Admitted Contentions

The following are admitted as legal issue contentions (regardless of whether so identified by the petitioner), on which further briefing will be required:

NEV-SAFETY-146	Reliance on preliminary or conceptual design information
NEV-SAFETY-149	Deviations in design and waste emplacement
NEV-SAFETY-161	Critical role of drip shield
NEV-SAFETY-169	Deferred retrieval plans
NEV-SAFETY-171	PMA and QA
NEV-SAFETY-184	Right-of-way N-48602
NEV-SAFETY-185	Right-of-way N-47748
NEV-SAFETY-186	Ranch boundary land
NEV-SAFETY-187	Public Land Order 7653
NEV-SAFETY-188	Public Land Order 6802/7534
NEV-SAFETY-189	Patent 27-83-002
NEV-SAFETY-190	Unpatented lode and placer mining claims
NEV-SAFETY-191	Nye County monitoring wells
NEV-SAFETY-192	Land outside DOE's rights-of-way
NEV-SAFETY-193	Land withdrawal
NEV-SAFETY-194	VH-1 water rights
NEV-SAFETY-201	Reliance on preliminary or conceptual design information

The Board recognizes that NEV-SAFETY-146 is identical to NEV-SAFETY-201. To avoid possible confusion, we have admitted both contentions, with the expectation that they will subsequently be consolidated.

NEV-SAFETY-146 concerns DOE's reliance on "preliminary or conceptual design information."<sup>648</sup> In ruling on that and other contentions, the Board has generally not accepted at

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<sup>646</sup> Nevada Petition at 701.

<sup>647</sup> Id. at 708.

<sup>648</sup> Nevada Petition at 770.

this point the argument that a contention is, in effect, “premature” – that a contention raises an issue that should be considered at a later stage in the licensing process. Accordingly, the Board contemplates that the eventual disposition of certain admitted contentions, such as NEV-SAFETY-139,<sup>649</sup> may depend on how NEV-SAFETY-146 is decided, or on subsequent briefing of other legal issues that bear on DOE’s prematurity defense.

B. Inadmissible Contentions

The Board is not admitting nine contentions.

NEV-SAFETY-135<sup>650</sup> violates 10 C.F.R. § 2.309(f)(1)(iv) and (vi) in that it fails to demonstrate a genuine dispute on a material issue. The challenged design is “not important to safety” within the meaning of NRC regulations, and the contention ignores design features that render an airtight closure unnecessary and irrelevant.

NEV-SAFETY-195,<sup>651</sup> NEV-SAFETY-197,<sup>652</sup> and NEV-SAFETY-198<sup>653</sup> all violate 10 C.F.R. § 2.335 and involve the subject matter of a pending Commission rulemaking. Nevada has petitioned, under 10 C.F.R. § 2.335(b), for a waiver on the ground that special circumstances are such that pertinent regulations would not serve purposes for which they were adopted. Nevada’s waiver petition will be addressed in a subsequent order or orders, along with various admitted legal issue contentions.

NEV-NEPA-017<sup>654</sup> raises no genuine dispute on an issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi). The contention urges a legal interpretation of the NWPA that is contrary to the plain meaning of the statute and Commission interpretations thereof.

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<sup>649</sup> Id. at 739.

<sup>650</sup> Id. at 726.

<sup>651</sup> Id. at 1016.

<sup>652</sup> Id. at 1025.

<sup>653</sup> Id. at 1028.

<sup>654</sup> Id. at 1116.

NEV-NEPA-019<sup>655</sup> violates 10 C.F.R. § 2.309(f)(1)(iv) and (vi) in that it seeks further environmental analysis that is contrary to the rule of reason regarding the practical limits of projecting radiation doses beyond 1,000,000 years into the future.

INYO-JOINT-SAFETY-004<sup>656</sup> is beyond the scope of this proceeding and fails to show a genuine dispute on a material issue, in violation of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi). Whether requirements of other federal agencies have been met is not a proper subject for a NRC proceeding.

NEI-NEPA-002<sup>657</sup> fails to demonstrate a genuine dispute on a material issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi). DOE's challenged environmental analysis presents a permissible worst case scenario. NEPA allows an agency to conservatively "bound" adverse environmental impacts, either deliberately or inadvertently.

NEI-NEPA-003<sup>658</sup> is not admissible as either a factual or legal issue contention. Insofar as it is proffered as a factual contention, it lacks the required affidavit support.<sup>659</sup> Insofar as it is proffered as a legal issue contention, contrary to 10 C.F.R. § 2.309(f)(1)(vi), it does not present a genuine dispute because, even were the challenged analysis not required, it would be permissible.

## XII. CONCLUSION

For the reasons set forth above, the petitions of Nevada, NEI, Nye, Nevada 4 Counties, California, Clark, Inyo, and White Pine are granted and the petition of Caliente is denied.

At this time, petitioners NCA and JTS have established their standing and each have at least one admissible contention. As previously explained, both petitioners have yet to

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<sup>655</sup> Id. at 1121.

<sup>656</sup> Inyo Petition at 86.

<sup>657</sup> NEI Petition at 44.

<sup>658</sup> Id. at 48.

<sup>659</sup> See Section III.A supra.

demonstrate compliance with all requirements of 10 C.F.R. § 2.1012(b) and need to do so before their petitions may be granted.

Subsequent orders will address the briefing of legal issue contentions, initial discovery disclosures, scheduling, and other case management matters.

XIII. ORDER

For the foregoing reasons, it is this 11th day of May 2009, ORDERED that:

1. Caliente's petition to intervene in this proceeding is denied for failure to demonstrate standing.

2. The petitions to intervene of Nevada, NEI, Nye, Nevada 4 Counties, California, Clark, Inyo, and White Pine are granted.

3. NCA and JTS have established their standing and each have at least one admissible contention. Until they can demonstrate compliance with the LSN requirements, however, their party status is denied.

4. The contentions listed in Attachment A are admissible.

5. The contentions listed in Attachment B are inadmissible.

6. TSO's March 5, 2009 motion for leave to file an amended petition is granted.

7. TSO's March 17, 2009 motion for leave to file an answer to TIM's reply is denied as moot.

8. TIM's March 11, 2009 motion for LSN certification out of time is denied.

9. The unopposed requests from Eureka and Lincoln to participate as interested governmental bodies, pursuant to 10 C.F.R. § 2.315(c), are granted.

10. Eureka's February 24, 2009 motion for leave to file a reply to the oppositions filed by DOE and the NRC Staff is denied.

11. Nevada's January 16, 2009 motion to amend its petition to intervene as a full party is denied.

12. NEI's February 13, 2009 motion to strike Nevada's answer to NEI is denied as moot.

In accordance with 10 C.F.R. § 2.1015(b), any appeal to the Commission from this

Memorandum and Order:

must be filed with the Commission no later than ten (10) days after service of the order. A supporting brief must accompany the notice of appeal. Any other party, interested governmental participant, or potential party may file a brief in opposition to the appeal no later than ten (10) days after the service of the appeal.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARDS

CAB-01

CAB-02

CAB-03

*/RA/*

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William J. Froehlich, Chairman  
ADMINISTRATIVE JUDGE

*/RA/*

\_\_\_\_\_  
Michael M. Gibson, Chairman  
ADMINISTRATIVE JUDGE

*/RA/*

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Paul S. Ryerson, Chairman  
ADMINISTRATIVE JUDGE

*/RA/*

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Thomas S. Moore  
ADMINISTRATIVE JUDGE

*/RA/*

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Alan S. Rosenthal  
ADMINISTRATIVE JUDGE

*/RA/*

\_\_\_\_\_  
Michael C. Farrar  
ADMINISTRATIVE JUDGE

*/RA/*

\_\_\_\_\_  
Richard E. Wardwell  
ADMINISTRATIVE JUDGE

*/RA/*

\_\_\_\_\_  
Nicholas G. Trikouros  
ADMINISTRATIVE JUDGE

*/RA/*

\_\_\_\_\_  
Mark O. Barnett  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
May 11, 2009

ATTACHMENT A  
(Admissible Contentions)

**CAB-01**

NEV-SAFETY-001	DOE Integrity
NEV-SAFETY-002	DOE Management
NEV-SAFETY-003	Quality Assurance Implementation
NEV-SAFETY-004	Content of Quality Assurance Program
NEV-SAFETY-005	Emergency Plan
NEV-SAFETY-006	Part 21 Compliance
NEV-SAFETY-007	Retrieval Plans and QA
NEV-SAFETY-008	ALARA and the Aging Facility
NEV-SAFETY-009	Increasing CO <sub>2</sub> Levels on Future Climate Projections
NEV-SAFETY-010	Consideration of Forcing Functions on Future Climate Projections
NEV-SAFETY-011	Human-Induced Climate Changes on Prediction of the Next Glacial Period
NEV-SAFETY-012	Projections of Future Wetter Climate Conditions
NEV-SAFETY-013	Future Climate Projections Need to Include Extreme Precipitation Events
NEV-SAFETY-014	Precipitation Model
NEV-SAFETY-015	Alternative Precipitation Models and Weather Variables
NEV-SAFETY-016	Qualification of Climate and Infiltration Models
NEV-SAFETY-017	Calibration and Simulation of Precipitation Model
NEV-SAFETY-018	Use of Climate Data from the Analog Sites
NEV-SAFETY-019	Future Infiltration Projections Need to Include Reduced Vegetation Cover
NEV-SAFETY-020	Net Infiltration Alternative Conceptual Model
NEV-SAFETY-021	Infiltration Model and Changes in Soil and Rock Properties
NEV-SAFETY-022	Net Infiltration Model Water Balance
NEV-SAFETY-023	Evaluation of Alternative Net Infiltration Models
NEV-SAFETY-024	Precipitation Data in Net Infiltration Model
NEV-SAFETY-025	Site-Specific Data in Net Infiltration Model
NEV-SAFETY-026	Soil Properties Data in Net Infiltration Model
NEV-SAFETY-027	Rock Properties Data in Net Infiltration Model
NEV-SAFETY-028	Net Infiltration Model Rock Properties Uncertainty Analysis
NEV-SAFETY-029	Spatial Variability of Soils and Vegetation in Net Infiltration Model
NEV-SAFETY-030	Temporal Variability in Precipitation in Net Infiltration Model
NEV-SAFETY-031	Calibration of Net Infiltration Model
NEV-SAFETY-032	Use of Initial Conditions in Net Infiltration Model
NEV-SAFETY-033	Approach to Estimating Percolation
NEV-SAFETY-034	Representation of Storm Duration for Net Infiltration Modeling
NEV-SAFETY-035	Episodic Nature of Infiltration Fluxes in Net Infiltration Analysis
NEV-SAFETY-036	Corroboration of Model Results in Post-Model Validation of Net Infiltration Simulations
NEV-SAFETY-037	Net Infiltration Model Methodology
NEV-SAFETY-038	Parameter Correlations in Net Infiltration Model
NEV-SAFETY-039	Temperature Lapse Rate Verification
NEV-SAFETY-040	Parameter Uncertainty Treatment in Net Infiltration Model
NEV-SAFETY-041	Erosion FEP Screening
NEV-SAFETY-042	Validation of Unsaturated Zone Flow Model by Simulation of Natural Chloride Distribution in Pore Waters
NEV-SAFETY-043	Validation of Unsaturated Zone Flow Model by Carbon-14 Contents, Strontium Isotope Compositions and Calcite Mineral Precipitate Abundances

NEV-SAFETY-044	Flow in the Unsaturated Zone from Episodic Infiltration
NEV-SAFETY-045	Effects of Episodic Flow
NEV-SAFETY-046	Extreme Events Undefined
NEV-SAFETY-047	Physical Basis of Site Scale Unsaturated Zone Flow
NEV-SAFETY-048	Multi-Scale Thermal-Hydrologic Model
NEV-SAFETY-049	Models of Fluid Movement in the Unsaturated Zone
NEV-SAFETY-050	Alternative Discrete Fracture Flow Models
NEV-SAFETY-051	Potential Convective Self Organization of 2-Phase Flow
NEV-SAFETY-052	EBS and Near-Field Modeling Approach
NEV-SAFETY-053	Application of the Fracture Matrix Dual Continuum Model to All Unsaturated Zone Flow Processes
NEV-SAFETY-054	Constitutive Relationships in the Yucca Mountain Infiltration, Thermo-Hydrologic, and TSPA Models
NEV-SAFETY-055	Data for the Chemistry of Pore Waters in the Topopah Springs (TSw) Formation
NEV-SAFETY-056	Geochemical Interactions and Evolution in the Unsaturated Zone, Including Thermo-Chemical Alteration of TSw Host Rock
NEV-SAFETY-057	Data for Near-Field Chemistry Models
NEV-SAFETY-058	Groundwater Samples in the Unsaturated Zone Sorption Tests
NEV-SAFETY-059	Groundwater Compositions Assumed
NEV-SAFETY-060	Empirical Site-Specific Data and the Near-Field Chemistry Model
NEV-SAFETY-061	Ambient Seepage into Emplacement Drifts
NEV-SAFETY-062	Thermal Seepage into Emplacement Drifts
NEV-SAFETY-063	Effect of Rock Bolts on Ambient Seepage
NEV-SAFETY-064	Effect of Rock Bolts on Thermal Seepage
NEV-SAFETY-065	Structural Control of Seepage in the Emplacement Drift
NEV-SAFETY-066	Attenuation of Seepage into Naturally Fractured Drift Walls
NEV-SAFETY-067	Evaluation of Uncertainties in Estimated Chemical Properties, Especially pH Values, of Evaporated Drift Brines
NEV-NEPA-001	Transportation Sabotage Scenarios
NEV-NEPA-002	Transportation Sabotage Cleanup Costs
NEV-NEPA-003	Transportation Accident Cleanup Costs
NEV-NEPA-004	Shared Use Option
NEV-NEPA-005	Radiological Regions of Influence for Transportation
NEV-NEPA-006	Caliente Rail Alignment Plan and Profile Information
NEV-NEPA-007	Overweight Trucks
NEV-NEPA-008	Impacts on Aesthetic Resources
NEV-MISC-002	Alternate Waste Storage Plans
CLK-SAFETY-002	The DOE's Failure to Analyze Missile Testing
CLK-SAFETY-003	The DOE Miscalculates Basaltic Magma Melting Depth
CLK-SAFETY-004	The DOE Ignores the Time Span of Basaltic Volcanism
CLK-SAFETY-005	The DOE Improperly Focuses on Upper Crustal Extension Patterns
CLK-SAFETY-006	The DOE Improperly Excludes the Death Valley Volcanic Field and Greenwater Range from Volcanism Calculations
CLK-SAFETY-007	The DOE Improperly Estimates Igneous Event Probability for 10,000 Years and 1,000,000 Years
CLK-SAFETY-008	The DOE Ignores 11-Million Year Volcanism Data and Instead Relies on Only 5-Million Year Volcanism Data
CLK-SAFETY-009	The DOE Fails to Consider Alternative Igneous Event Conceptual Models

CLK-SAFETY-010	The DOE Ignores Igneous Event Data Evaluated Since 1996 in the Total System Performance Analysis
CLK-SAFETY-011	The DOE Lacks Sufficient Geophysical Data to Support Its Volcanic Model
CLK-NEPA-001	The DOE Ignores Impacts on Emergency Management and Public Safety
CLK-NEPA-002	The DOE Fails to Analyze Known and Feasible Rail Corridor Alternatives
CLK-NEPA-003	The DOE Ignores Socio-Economic Impacts
NYE-SAFETY-001	Failure to include activities in the performance confirmation program sufficient to assess the adequacy of information used to evaluate the capability of the upper natural barrier (UNB) following repository closure
NYE-SAFETY-002	Failure to include activities in the performance confirmation program sufficient to assess the adequacy of information used to evaluate the capability of the lower natural barrier (LNB) following repository closure
NYE-SAFETY-003	Failure to include activities in the performance confirmation program sufficient to assess the adequacy of information used as the basis for the site-scale model relied upon to evaluate the capability of the saturated zone (SZ) feature of the lower natural barrier (LNB) following repository closure.
NYE-SAFETY-004	Failure to fully consider possible air quality and radiological changes due to pre-closure construction and operational activity
NYE-JOINT-SAFETY-006	The LA lacks any justification or basis for excluding potential aircraft crashes as a category 2 event sequence
NYE-NEPA-001	Failure to adequately consider cumulative impacts to the environment over time, from releases of radiological and other contaminants to groundwater and from surface water discharges
WHI-NEPA-001	Failure of Environmental Impact Statements to Fully Disclose Consequences of Radiation Contaminated Tephra Deposition in Areas Other Than That Directly Applicable to the Reasonably Maximally Exposed Individual
WHI-NEPA-002	Failure of Environmental Impact Statements to Fully Disclose the Consequences of Atmospheric Transport of Radionuclides in Volcanic Gases
WHI-NEPA-003	Failure of Environmental Impact Statements to Discuss Means to Mitigate Adverse Impacts of Radiation Contaminated Tephra Deposition in Areas Other Than That Directly Applicable to the Reasonably Maximally Exposed Individual
WHI-NEPA-004	Failure of Environmental Impact Statements to Discuss Means to Mitigate diverse Impacts of Atmospheric Transport of Radionuclides in Volcanic Gases

**CAB-02**

NEV-SAFETY-068	In-Drift Condensation on Mineral Dust
NEV-SAFETY-069	Coupled Seepage and Dust Deliquescence
NEV-SAFETY-070	THC Evolution of Near-Field Pre-Seepage Unsaturated Zone Water
NEV-SAFETY-071	Microbially Induced Water Chemistry Changes in the Incubator Zone
NEV-SAFETY-072	Characterization of Dust Sources
NEV-SAFETY-073	In-Drift Organic Contribution by Ventilation or Unsaturated Zone Water
NEV-SAFETY-074	Impact of Microbial Activity
NEV-SAFETY-075	Microbially Influenced Corrosion Model
NEV-SAFETY-076	Microbial Denitrification
NEV-SAFETY-077	Corrosion from Rock Bolt Seepage
NEV-SAFETY-078	Static Corrosion Tests on Alloy 22
NEV-SAFETY-079	Static General Corrosion Test Solutions
NEV-SAFETY-080	Localized Corrosion, Chloride Bearing Mineral Deposits and Hot Wall Effects
NEV-SAFETY-081	Hydrogen Uptake Resulting From General Corrosion
NEV-SAFETY-082	Corrosion of Thermally Oxidized Titanium
NEV-SAFETY-083	Adequacy of Methods of General and Localized Corrosion Testing of the Drip Shield
NEV-SAFETY-084	Use of Differential Weight Loss to Estimate Very Low Corrosion Rates
NEV-SAFETY-085	Declining Corrosion Rate over Time
NEV-SAFETY-086	Role of Rock Dust on Canister Surfaces in Localized Corrosion
NEV-SAFETY-087	Intergranular SCC Corrosion During Dry-Wet Cycle
NEV-SAFETY-088	Thermodynamics of Complex Deliquescent Salt Reactions During C-22 Corrosion
NEV-SAFETY-089	Inhibition of C-22 Corrosion by High Nitrate to Chloride Ratio
NEV-SAFETY-090	Effects of Rock Bolt on C-22 and Ti-7 Corrosion Reactions
NEV-SAFETY-091	Representativeness of C-22 and Ti-7 Corrosion Testing Methods
NEV-SAFETY-092	Impacts of Fluoride Due to Breach of HLW Containers
NEV-SAFETY-093	Natural Lead Reactions on C-22
NEV-SAFETY-094	Significance of Mineral Crusts in C-22 Corrosion
NEV-SAFETY-095	Peak Thermal Period Seepage and Corrosion
NEV-SAFETY-096	Salt Production and C-22 Corrosion Due to Heat-Pipe Conditions
NEV-SAFETY-097	Crevice Corrosion on C-22 Due to Drip Shield Corrosion Debris
NEV-SAFETY-098	Rate of Drip Shield Interconnection Corrosion
NEV-SAFETY-099	Boric Acid Production from HLW Dissolution
NEV-SAFETY-100	Ground Support Components and In-Drift Modeling
NEV-SAFETY-101	Sulfur Accumulation at the Metal-Passive Film Interface
NEV-SAFETY-102	Sulfur Accumulation and Localized Corrosion
NEV-SAFETY-103	Sulfur Accumulation and Stress Corrosion Initiation
NEV-SAFETY-104	Sulfur Accumulation and Stress Corrosion Propagation
NEV-SAFETY-105	Drip Shield Corrosion Environment
NEV-SAFETY-106	Waste Container Corrosion Environment
NEV-SAFETY-107	Electrochemical Reduction of Nitrate
NEV-SAFETY-108	Molten Salt Corrosion of the Canister
NEV-SAFETY-109	Molten Salt Corrosion of the Drip Shield
NEV-SAFETY-110	Rock Bolt Corrosion
NEV-SAFETY-111	HLW Waste Glass Dissolution
NEV-SAFETY-112	HLW Waste Glass Degradation
NEV-SAFETY-113	Competitive Sorption in the Unsaturated Zone

NEV-SAFETY-114	Applicability of Sorption Data
NEV-SAFETY-115	Matrix Diffusion
NEV-SAFETY-116	Saturated Zone Redox Conditions
NEV-SAFETY-117	Radionuclide Sorption in the Saturated Zone
NEV-SAFETY-118	Estimation of Uncertainties in Soil-To-Plant Transfer Factors
NEV-SAFETY-119	Estimation of Uncertainties in Animal Product Transfer Coefficients
NEV-SAFETY-120	RMEI Diet
NEV-SAFETY-121	Host Rock Geomechanical Properties
NEV-SAFETY-122	Screening of Drift Degradation FEPs
NEV-SAFETY-123	Durability of Ground Support
NEV-SAFETY-124	Welding of Alpha Beta Titanium Alloy to Unalloyed Titanium
NEV-SAFETY-125	Effectiveness of Stress Relief to Eliminate SCC or Hydrogen Effects
NEV-SAFETY-126	Properties of Dissimilar Metal Weld Joints between Grade 29 and Grade 7 Titanium
NEV-SAFETY-127	Hydrogen and Erti-28 Filler Metal for Welded Joints Between Grade 29 and Grade 7 Titanium
NEV-SAFETY-128	Nuclear Code and Fabrication Quality Assurance Standards
NEV-SAFETY-129	Early Failure Mechanisms Associated with Titanium Fabrication
NEV-SAFETY-130	Drip Shield Emplacement Plan, Equipment, and Schedule
NEV-SAFETY-131	Rock Debris Removal
NEV-SAFETY-132	TEV Description
NEV-SAFETY-133	Drip Shield Gantry Description
NEV-SAFETY-134	Retrieval or Alternate Storage Description
NEV-NEPA-009	Transportation Sabotage Risk vs. At-Reactoer Storage
NEV-NEPA-010	Long-Term Radiation Exposure Following Sabotage
NEV-NEPA-011	Sabotage Risk, Pressurized Cask
NEV-NEPA-012	Transportation Risk Assumptions
NEV-NEPA-013	Grazing Impacts
NEV-NEPA-014	Deferred Assessment of Railroad Construction Impacts on Grazing
NEV-NEPA-015	TAD Shipment Estimates
NEV-NEPA-016	Representative Routes
NEV-MISC-003	LA References
NEV-MISC-004	Aging Facility Role under NWPA
4NC-SAFETY-001	Insufficient analysis in the License Application and SAR of transportation container usage and correlating impacts on worker safety
4NC-NEPA-001	Insufficient analysis in the Environmental Impact Statement of significant and substantial considerations of the environmental impacts of transportation by truck through the Four Nevada Counties
4NC-NEPA-002	Insufficient analysis in Environmental Impact Statement of significant and substantial considerations related to emergency response capacity within the Four Nevada Counties
4NC-NEPA-003	Insufficient analysis in Environmental Impact Statement of significant & substantial new considerations related to selection of spent nuclear fuel transportation container, which renders Environmental Impact Statement inadequate

CAL-NEPA-001	DOE's NEPA Documents Impermissibly Segment the Project by Deferring Analysis of the Environmental Impacts of Transportation of Spent Nuclear Fuel and High-Level Waste Through California to Yucca Mountain
CAL-NEPA-002	DOE's NEPA Documents Impermissibly Segment the Project as to Route Selection and Route-Specific Impact Analysis
CAL-NEPA-003	DOE's NEPA Documents Impermissibly Fail to Analyze and Disclose Different Environmental Impacts from the Mina and Caliente Routes
CAL-NEPA-004	DOE's NEPA Documents Fail to Adequately Discuss or Analyze Mitigation in California Adequately
CAL-NEPA-005	DOE's NEPA Documents Are Based on an Incomplete and Inaccurate Project Description, Since a Doubling or Tripling of Yucca Mountain's Capacity Is Reasonably Foreseeable Due to DOE's Request to Congress to Authorize Such a Capacity Increase
CAL-NEPA-007	DOE's NEPA Documents Fail to Adequately Describe Transportation Impacts on Emergency Services in San Bernardino County
CAL-NEPA-008	DOE's NEPA Documents Fails to Describe the Maximum Reasonably Foreseeable Accident
CAL-NEPA-010	Failure to Analyze Impacts of Intermodal Transfers
CAL-NEPA-011	Failure to Evaluate Impacts Within All Radiologic Regions of Influence
CAL-NEPA-012	Failure to Discuss and Analyze Collocation Risks
CAL-NEPA-013	Failure to Discuss and Analyze Barge Risks
CAL-NEPA-014	Failure to Describe and Analyze Waste Acceptance Criteria
CAL-NEPA-015	By Using Representative Routes, DOE Has Failed to Analyze Environmental Impacts of Probable Routes Railroads Would Use
CAL-NEPA-017	Environmental Impacts from the Use of Heavy Haul Trucks at Local Sites
CAL-NEPA-018	Failure to Analyze Impacts from the Use of California State Route
CAL-NEPA-019	Failure to Analyze Use of TAD Canisters
CAL-NEPA-020	Failure to Adequately Analyze Impacts on Local Emergency Management Responsibilities
CAL-NEPA-021	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Cumulative Impact on Groundwater in the Lower Carbonate Aquifer
CAL-NEPA-022	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Cumulative Impact on Groundwater in the Volcanic-Alluvial Aquifer
CAL-NEPA-023	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Cumulative Impact from Surface Discharge of Groundwater
CAL-NEPA-024	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Necessary Mitigation and Remediation Measures for Radionuclides Surfacing at Alkali Flat / Franklin Lake Playa
CAL-NEPA-025	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Cumulative Impacts from Groundwater Pumping
JTS-NEPA-001	Doses Related To Ingestion Of Particulate Matter
JTS-NEPA-003	Repository Thermal Effects
JTS-NEPA-004	Saturated Zone Flow Model
JTS-NEPA-005	Infiltration Flux
JTS-NEPA-006	Economic Analysis
JTS-NEPA-007	Mitigation

JTS-NEPA-008	Future Climate
JTS-NEPA-009	NEPA Requirements
NCA-NEPA-001	NEPA Requirements
NCA-MISC-001	Land Ownership and Control

**CAB-03**

NEV-SAFETY-136	Phased Ground Support Installation
NEV-SAFETY-137	Construction of the Emplacement Drifts
NEV-SAFETY-138	Description of the Ventilation System for the Repository Options Made in the TSPA-LA Regarding Waste Isolation
NEV-SAFETY-139	Description of Reasonable Emergencies
NEV-SAFETY-140	Engineered Barrier System Design Basis
NEV-SAFETY-141	Ground Support Descriptions
NEV-SAFETY-142	Standard Titanium Grades Considered
NEV-SAFETY-143	Available Drip Shield Design Information
NEV-SAFETY-144	Drip Shield Failure Mechanisms
NEV-SAFETY-145	Drip Shield Specifications
NEV-SAFETY-146	Reliance on Preliminary or Conceptual Design Information
NEV-SAFETY-147	Evaluation of Data Used in Drip Shield Failure Probability
NEV-SAFETY-148	Evaluation of Computational Procedure Used in Drip Shield Failure Probability
NEV-SAFETY-149	Deviations in Design and Waste Emplacement
NEV-SAFETY-150	Basaltic Magma Melting Depth
NEV-SAFETY-151	Time Span of Basaltic Volcanism
NEV-SAFETY-152	Focus on Upper Crustal Extension Patterns
NEV-SAFETY-153	Exclusion of Death Valley from Volcanism Calculations
NEV-SAFETY-154	Igneous Event Probability for 10,000 Years and 1,000,000 Years
NEV-SAFETY-155	11-Million Year vs. 5-Million Year Volcanism Data
NEV-SAFETY-156	Alternative Igneous Event Conceptual Models
NEV-SAFETY-157	Igneous Event Data in the TSPA
NEV-SAFETY-158	Geophysical Data in DOE's Volcanic Model
NEV-SAFETY-159	Propagation of Conceptual and Parametric Uncertainties through the Safety Assessment
NEV-SAFETY-160	Probability Density Functions Used in the TSPA
NEV-SAFETY-161	Critical Role of Drip Shield
NEV-SAFETY-162	Drip Shield Installation Schedule
NEV-SAFETY-163	Screening of Near-Field Criticality
NEV-SAFETY-164	Aggregation of Probability Distributions
NEV-SAFETY-165	Saturated Zone Expert Elicitation
NEV-SAFETY-166	Probabilistic Seismic Hazard Analysis Expert Elicitation
NEV-SAFETY-167	Probabilistic Volcanic Hazard Analysis Expert Elicitation
NEV-SAFETY-168	Retrieval Practicality
NEV-SAFETY-169	Deferred Retrieval Plans
NEV-SAFETY-170	Conservatisms and the PMA
NEV-SAFETY-171	PMA and QA
NEV-SAFETY-172	Inspection and Verification of TAD
NEV-SAFETY-173	Emplacement Drift Monitoring
NEV-SAFETY-174	Controls and Restrictions
NEV-SAFETY-175	Controls on Pilot Relief
NEV-SAFETY-176	Controls on Pilot Maneuvering
NEV-SAFETY-177	Controls on Helicopters
NEV-SAFETY-178	Basis for Aircraft Exclusions
NEV-SAFETY-179	Controls on Aircraft Operations (Mid-Air)
NEV-SAFETY-180	Crash Frequency of Fixed-Wing Aircraft
NEV-SAFETY-181	Basis for Crash Density Calculations
NEV-SAFETY-182	Glide Distance
NEV-SAFETY-183	Crash Rates

NEV-SAFETY-184	Right-of-Way N-48602
NEV-SAFETY-185	Right-of-Way N-47748
NEV-SAFETY-186	Ranch Boundary Land
NEV-SAFETY-187	Public Land Order 7653
NEV-SAFETY-188	Public Land Order 6802/7534
NEV-SAFETY-189	Patent 27-83-002
NEV-SAFETY-190	Unpatented Lode and Placer Mining Claims
NEV-SAFETY-191	Nye County Monitoring Wells
NEV-SAFETY-192	Land Outside DOE's Rights-Of-Way
NEV-SAFETY-193	Land Withdrawal
NEV-SAFETY-194	VH-1 Water Rights
NEV-SAFETY-196	Description of Security Measures
NEV-SAFETY-199	Performance Confirmation and Available Technology
NEV-SAFETY-200	Performance Confirmation Program Level of Information
NEV-SAFETY-201	Reliance on Preliminary or Conceptual Design Information
NEV-NEPA-018	Overlap between NEPA and AEA
NEV-NEPA-020	Radionuclide Contamination of Aquifer
NEV-NEPA-021	Contaminated Aquifer Discharges
NEV-NEPA-022	No-Action Alternative
NEV-NEPA-023	Aircraft Crash Scenarios – Aging Facility
NEV-MISC-005	Role of Aging Facility
INY-SAFETY-001	Failure to Adequately Describe and Analyze the Flow Path in the Lower Carbonate Aquifer through Which Contaminants May Migrate and Adversely Impact Areas Within The County of Inyo
INY-SAFETY-002	Failure to Adequately Describe and Analyze the Impact of the Repository in Combination with a Continuation of Existing Levels of Groundwater Pumping on the Potential Migration of Contaminants from the Proposed Repository
INY-SAFETY-003	Failure to Adequately Describe and Analyze the Volcanic Field in the Greenwater Range in and Adjacent to Death Valley National Park
INY-JOINT-SAFETY-005	The LA Lacks any Justification or Basis for Excluding Potential Aircraft Crashes as a Category 2 Event Sequence
INY-NEPA-001	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Direct and Cumulative Impacts on Groundwater in the Lower Carbonate Aquifer
INY-NEPA-002	Failure to Adequately Describe and Analyze the Cumulative Impact of the Repository in Combination with a Continuation of Existing Levels of Groundwater Pumping on the Potential Migration of Contaminants from the Proposed Repository
INY-NEPA-003	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Cumulative Impact on Groundwater in the Volcanic-Alluvial Aquifer
INY-NEPA-004	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Repository's Cumulative Impact from Surface Discharge of Groundwater

INY-NEPA-005	Failure to Provide a Complete and Adequate Discussion of the Nature and Extent of the Necessary Mitigation and Remediation Measures for Radionuclides Surfacing at Alkali Flat/Franklin Lake Playa
INY-NEPA-006	Failure to Adequately Describe and Analyze the Describe and Analyze the Volcanic Field in the Greenwater Range in and Adjacent to Death Valley National Park Thus Failing to Assess the Potential Environmental Impacts Resulting from Igneous Activity that Could Disrupt the Repository
INY-NEPA-007	Failure to Address Socioeconomic Impacts in the County of Inyo
NEI-SAFETY-001	Spent Nuclear Fuel Direct Disposal in Dual Purpose Canisters
NEI-SAFETY-002	Insufficient Number of Non-TAD SNF Shipments to Yucca Mountain
NEI-SAFETY-003	Excessive Seismic Design of Aging Facility
NEI-SAFETY-004	Low Igneous Event Impact on TSPA
NEI-SAFETY-005	Excessive Conservatism in the Postclosure Criticality Analysis
NEI-SAFETY-006	Drip Shields Are Not Necessary
NEI-NEPA-001	Inadequate NEPA Analysis for 90% TAD Canister Receipt Design

ATTACHMENT B  
(Inadmissible Contentions)

**CAB-01**

NEV-MISC-001	Erosion And Geologic Disposal
CLK-SAFETY-001	The DOE's Inadequate Treatment of Uncertainty
CLK-SAFETY-012	The DOE's Lack of Integrity Poses a Significant Public Safety Concern
NYE-JOINT-SAFETY-005	Failure to include the requirements of the National Incident Management System (NIMS), dated March 1, 2008, and Related Documentation in Section 5.7 Emergency Planning of the Yucca Mountain Repository Safety Analysis Report (SAR)

**CAB-02**

CAL-NEPA-009	DOE Failed to Comply with NEPA's Procedural Requirements for Full Public Review and Opportunity for Comments in California
CAL-NEPA-016	DOE Has Ignored the NAS Recommendation of Independent Examination of the Security of Shipments
JTS-NEPA-002	Analysis of Alternatives to the Proposed Action
NCA-MISC-002	Water Rights

**CAB-03**

NEV-SAFETY-135	The Ventilation Doors at the Entry to the Emplacement Drifts
NEV-SAFETY-195	9/11 Terrorist Attack
NEV-SAFETY-197	Physical Protection Standard
NEV-SAFETY-198	Material Control and Accounting Plan
NEV-NEPA-017	NRC Staff's NEPA Review
NEV-NEPA-019	Peak Dose Identification
INY-JOINT-SAFETY-004	Failure to Include the Requirements of the National Incident Management System (NIMS), Dated March 1, 2004, and Related Documentation in Section 5.7 Emergency Planning of the Yucca Mountain Repository Safety Analysis Report (SAR)
NEI-NEPA-002	Overestimate of Number of Truck Shipments
NEI-NEPA-003	Over-Conservatism in Sabotage Analysis

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
)  
U.S. DEPARTMENT OF ENERGY )  
)  
(High-Level Waste Repository) )  
)

Docket No. 63-001-HLW

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing MEMORANDUM AND ORDER (IDENTIFYING PARTICIPANTS AND ADMITTED CONTENTIONS) (LBP-09-06), dated May 11, 2009, have been served upon the following persons by Electronic Information Exchange.

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**CAB 03**

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MEMORANDUM AND ORDER (IDENTIFYING PARTICIPANTS AND ADMITTED CONTENTIONS)(LBP-09-06)

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U.S. DEPARTMENT OF ENERGY (High Level Waste Repository) Docket No. 63-001-HLW  
MEMORANDUM AND ORDER (IDENTIFYING PARTICIPANTS AND ADMITTED CONTENTIONS)(LBP-09-06)

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U.S. DEPARTMENT OF ENERGY (High Level Waste Repository) Docket No. 63-001-HLW  
MEMORANDUM AND ORDER (IDENTIFYING PARTICIPANTS AND ADMITTED CONTENTIONS)(LBP-09-06)

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